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 NEWS 25 NOV 15 Derwent Indian patent publication number
format enhanced
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VERSION IS V8.2,          CURRENT MACINTOSH VERSION IS
V6.0c(ENG) AND V6.0Jc(JP),          AND CURRENT DISCOVER
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=> s hybrid?/bi,ab   350364 HYBRID?/BI              304362
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L1     350364 HYBRID?/BI,AB

=> s captur?/bi,ab   122474 CAPTUR?/BI              105657
CAPTUR?/AB
L2     122474 CAPTUR?/BI,AB

=> s l1 and l2
L3       3707 L1 AND L2

=> s (elut? or releas?)/bi,ab   147950 ELUT?/BI
145252 ELUT?/AB              714003 RELEAS?/BI
658770 RELEAS?/AB
L4     856272 (ELUT? OR RELEAS?)/BI,AB

=> s l3 and l4
L5       247 L3 AND L4

=> s l5 not 2007/py   1302016 2007/PY
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11/26/07 dc

L6 201 L5 NOT 2007/PY

=> s l6 not 2006/py 1502233 2006/PY
L7 162 L6 NOT 2006/PY

=> s l7 not 2005/py 1401953 2005/PY
L8 141 L7 NOT 2005/PY

=> s l8 not 2004/py 1329309 2004/PY
L9 128 L8 NOT 2004/PY

=> s l9 not 2003/py 1265603 2003/PY
L10 103 L9 NOT 2003/PY

=> d his
(FILE 'HOME' ENTERED AT 11:18:55 ON 20 NOV 2007)
FILE 'CAPLUS' ENTERED AT 11:19:14 ON 20 NOV 2007
L1 350364 S HYBRID?/BI,AB
L2 122474 S CAPTUR?/BI,AB
L3 3707 S L1 AND L2
L4 856272 S (ELUT? OR RELEAS?)/BI,AB
L5 247 S L3 AND L4
L6 201 S L5 NOT 2007/PY
L7 162 S L6 NOT 2006/PY
L8 141 S L7 NOT 2005/PY
L9 128 S L8 NOT 2004/PY
L10 103 S L9 NOT 2003/PY

=> d l10 1-103 bib ab

L10 ANSWER 1 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:928132 CAPLUS <<LOGINID::20071120>>
DN 137:381960
TI Direct selection of cells by secretion product
IN Miltenyi, Stefan; Radbruch, Andreas; Manz, Rudi
PA Germany
SO U.S. Pat. Appl. Publ., 29 pp., Cont. of U. S. Ser. No. 441,259, abandoned. CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 2002182645 A1 20021205 US 2002-94461 20020307
PRAI US 1995-441259 B1 19950515
AB Cells can be labeled with products which they secrete and ***release*** in an efficient manner by coupling the cells at their surface to a specific binding partner for the product and allowing the product to be ***captured*** by the specific binding partner as it is secreted and ***released*** . The product-labeled cells can then be further coupled to suitable labels if desired and sepd. according to the presence, absence or amt. of product.

L10 ANSWER 2 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:894756 CAPLUS <<LOGINID::20071120>>
DN 137:386413
TI Apparatus and method for gene concentration by ***hybridization***
IN Miyahara, Takatoshi
PA T.U.M. Kenkyosho K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp. CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 2002335962 A 20021126 JP 2001-153629 20010523
PRAI JP 2001-153629 20010523
AB This invention provides a method of gene concn. from samples by nucleic acid ***hybridization*** . Specific probes were immobilized on the solid support for ***capturing*** target genes in the reaction tubes. After removal of the remained sample and washing the tube, the target gene was ***release*** from the solid support by increase of the temp. The invention provides detailed description about the app.

L10 ANSWER 3 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:791946 CAPLUS <<LOGINID::20071120>>
DN 137:274053
TI Procedure and device for the replication of a high-density molecular array immobilized on a solid surface
IN Stengele, Klaus-Peter
PA Chemogenix G.m.b.H., Germany
SO Ger. Offen., 16 pp. CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI DE 10116428 A1 20021017 DE 2001-10116428 20010402
PRAI DE 2001-10116428 20010402
AB A method of creating probe arrays such as DNA microarrays by replica plating of complementary sequences from a master array is described. The first high d. array is constructed by std. methods. It is then incubated with a probe library to ***capture*** and order probes from a soln. Unbound material is removed by washing at an appropriate stringency. A second surface is brought into close proximity to the first and the ***hybrids*** are ***eluted*** and transferred to the second plate to give an array that is the complement of of the master plate. The order of the array may be maintained by use of a gel or high viscosity soln. as the transfer medium. After thorough washing under strongly denaturing conditions the master plate can be reused.
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:661425 CAPLUS <<LOGINID::20071120>>
DN 137:306817
TI Microchip bioprocessor for integrated nanovolume sample purification and DNA sequencing
AU Paegel, Brian M.; Yeung, Stephanie H. I.; Mathies, Richard A.
CS Department of Chemistry and UCB/UCSF Joint Bioengineering Program, University of California, Berkeley, CA, 94720, USA
SO Analytical Chemistry (2002), 74(19), 5092-5098 CODEN: ANCHAM; ISSN: 0003-2700
PB American Chemical Society
DT Journal
LA English
AB A microfabricated electrophoretic bioprocessor for integrated DNA sequencing sample desalting, template removal, preconcn., and CE anal. is presented. A low-viscosity gel ***capture*** matrix, contg. an acrylamide-copolymd. oligonucleotide

complementary to the 20-base sequence directly 3' of the M13-40 universal forward priming site, is introduced into the 60-nL ***capture*** chamber. Unpurified DNA sequencing reaction products are electrophoretically driven through the chamber; extension products ***hybridize*** to the matrix, while contaminating buffering ions, Cl-, excess primer, and template DNA are unretained. Purifn. under optimized conditions is complete in only 120 s (binding temp. 50.degree., driving voltage 250 V). High-speed, integrated sequencing anal. is accomplished by ***releasing*** the gel-purified duplex at 67.degree. and directly injecting onto a 15.9-cm effective length CE microchannel. Electrophoretic resoln. of the sequencing products is complete in 32 min, producing a total of 560 bp with phred quality q .gtoreq. 20 (accuracy .gtoreq.99%). This fully integrated nanoliter process decreases the purifn. time .apprx.10-fold and the process vol. .apprx.100-fold while providing state-of-the-art sequencing results.
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:610803 CAPLUS <<LOGINID::20071120>>
DN 137:291150
TI Label-free determination of picogram quantities of DNA by stripping voltammetry with solid copper amalgam or mercury electrodes in the presence of copper
AU Jelen, Frantisek; Yosypchuk, Bogdan; Kourilova, Alena; Novotny, Ladislav; Palecek, Emil
CS Institute of Biophysics, Academy of Sciences of the Czech Republic, Brno, 61265, Czech Rep.
SO Analytical Chemistry (2002), 74(18), 4788-4793 CODEN: ANCHAM; ISSN: 0003-2700
PB American Chemical Society
DT Journal
LA English
AB Highly sensitive label-free techniques of DNA detn. are particularly interesting in relation to the present development of the DNA sensors. We show that subnanomolar concns. (related to monomer content) of unlabeled DNA can be detd. using copper solid amalgam electrodes or hanging mercury drop electrodes in the presence of copper. DNA is first treated with acid (e.g., 0.5 M perchloric acid), and the acid- ***released*** purine bases are directly detd. by the cathodic stripping voltammetry. Vols. of 5-3 .mu.L of acid-treated DNA can easily be analyzed, thus making possible the detn. of picogram and subpicogram amts. of DNA corresponding to attomole and subattomole quantities of 1000-base pair DNA. Application of this detn. in DNA ***hybridization*** detection is demonstrated using surface H for the ***hybridization*** (superparamagnetic beads with covalently attached DNA probe) and the mercury electrodes only for the detn. of DNA selectively ***captured*** at surface H.
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:522501 CAPLUS <<LOGINID::20071120>>
DN 137:89422
TI Column-based ***hybridization*** assay involving nuclease cleavage of probe-target nucleic acid complexes
IN Harbron, Stuart
PA UK
SO U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S. Ser. No. 403,105. CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- --------
PI US 2002090617 A1 20020711 US 2001-833918 20010413 WO 2000022165 A1 20000420 WO 1999-GB3383 19991012 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 6423492 .B1 20020723 US 1999-403105 19991014
PRAI GB 1998-22067 A 19981012 WO 1999-GB3383 W 19991012 US 1999-403105 A2 19991014 GB 1997-7531 A 19970414 WO 1998-GB1057 W 19980409
AB The present invention provides a method for detecting a single-stranded target nucleic acid comprising the steps of: (a) forming a ***hybrid*** between a target nucleic acid and a nucleic acid probe, said nucleic acid probe labeled with an enzyme reagent which hydrolyzes single-stranded nucleic acid but is substantially without effect on double-stranded nucleic acid, said ***hybrid*** formed under conditions of pH which are outside the activity range of said enzyme reagent; (b) adjusting said pH to a value within the activity range of said enzyme reagent, whereby said enzyme reagent substantially hydrolyzes any single-stranded nucleic acid present; and (c) contacting said ***hybrid*** with a detection reagent to detect the ***hybrid*** . Prior to step (c) the nucleic acid probe or ***hybrid*** is brought into contact with a solid support to attach it thereto, or the nucleic acid probe or ***hybrid*** is brought into contact with a ***capture*** reagent, optionally linked to a solid support, to ***capture*** the nucleic acid probe or ***hybrid*** ; and the ***capture*** reagent or solid support on which the ***hybrid*** is immobilized is washed with a washing fluid while the ***capture*** reagent or solid support is contained within a vessel that is adapted to retain the ***capture*** reagent or solid support but not to retain fluid in which the ***capture*** reagent or solid support is dispersed, whereby material which has not been ***captured*** by the ***capture*** reagent or otherwise immobilized on a solid support is ***eluted*** from the vessel. It has now been found that the general method disclosed in the above invention may be further improved by adapting it for use with reagents immobilized onto a suitable material contained in a column. A column-based procedure not only allows more efficient washing of the bound ***hybrid*** to remove unbound components, but is also advantageously amenable to automation.

L10 ANSWER 7 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:509835 CAPLUS <<LOGINID::20071120>>
DN 137:228854
TI Synthesis of ***releasable*** electrophore tags for applications in mass spectrometry
AU Zhang, Xin; Xu, Linxiao; Wang, Poguan; Wang, Zhixian; Giese, Roger W.
CS Department of Pharmaceutical Sciences in the Bouve College of Health Sciences, Barnett Institute and Chemistry Department, Northeastern University, Boston, MA, 02115, USA

SO Bioconjugate Chemistry (2002), 13(5), 1002-1012 CODEN: BCCHES; ISSN: 1043-1802
PB American Chemical Society
DT Journal
LA English
AB ***Releasable*** electrophore mass tags (electrophore tags) are compds. for use as labels in ligand assays such as ***hybridization*** assays and immunoassays. In such assays, the electrophore-tagged reagent (e.g., DNA probe or antibody) is quantified at the conclusion of the assay by cleaving a bond in the attached tag so that the electrophore part can be brought into the gas phase (usually thermally) for detection by electron ***capture*** mass spectrometry (EC-MS) or a related technique. Interest in these tags is promoted mainly by their potential to provide highly sensitive and multiplexed assays. The high multiplexing arises from the opportunity to measure many such tags simultaneously in the mass spectrometer, where each tag has an electrophore part with a unique mass. In this study five precursors of electrophore mass tags are presented. Each precursor can lead to a large library of electrophore tags in a practical way, since each precursor can be converted to many different electrophore tags by reaction with commonly available phenols that provide a variation in mass. The phenol-reactive part of the tag is either a polyfluorobiphenyl or a benzyl chloride moiety. Representative library compds. are prepd. and detected in an inert ester form by gas chromatog. electron ***capture*** mass spectrometry (GC-EC-MS). Further, one tag is conjugated to DNA, and the resulting product is detected by laser-induced electron ***capture*** time-of-flight mass spectrometry on a silver surface. A calcn. by the semiempirical method AM1 for an ion formed by one of the electrophores suggests that ring rotation promotes dissociative electron ***capture*** . The features of practical synthesis, simple compn., physicochem. stability, high multiplicity, high sensitivity, and potential for high throughput detection make ***releasable*** electrophore mass tags attractive for highly multiplexed assays. This includes their use in SNP assays or dideoxy DNA sequencing for detection of mutations in individuals, where the combination of high accuracy and speed is essential.
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:441422 CAPLUS <<LOGINID::20071120>>
DN 137:153909
TI Production of a highly pure Mab from Cell-Pharm system CP-2500
AU Valdes, R.; Gonzalez, Y.; Ibarra, N.; Gonzalez, M.; Gomez, H.; Dorta, L.; Garcia, J.; Reyes, B.; Gomez, L.
CS Monoclonal Antibodies Division, Center for Genetic Engineering and Biotechnology, Havana, 10 600, Cuba
SO Animal Cell Technology: From Target to Market, Proceedings of the ESACT Meeting, 17th, Tyloesand, Sweden, June 10-14, 2001 (2001), 427-430. Editor(s): Lindner-Olsson, Elisabeth; Chatzissavidou, Nathalie; Luellau, Elke. Publisher: Kluwer Academic Publishers, Dordrecht, Neth. CODEN: 69CRYK; ISBN: 1-4020-0264-5
DT Conference
LA English
AB Productivity levels were analyzed at a pilot-scale version of Hollow Fiber (HF) system Cell-Pharm 2500 (35 ft2)/THP-1/1% FCS/500 .mu.M ferric citrate medium. We evaluated both expanded bed adsorption (EBA) and conventional packed bed (PB) (Protein A) to purify monoclonal antibody (Mab) IgG2b from feedstocks. Direct ***capture*** by STREAMLINE EBA resulted in 92% product recovery and 7-fold more concd. product. Process time and buffer consumption were also improved under EBA method (reduced). The purity (measured by amt. of host cell and medium proteins, DNA and SDS-PAGE) of ***eluted*** Mab by EBA was comparable to the purity obtained on the std. packed method using Protein A media.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:424586 CAPLUS <<LOGINID::20071120>>
DN 137:75353
TI Fabrication of microchambers defined by photopolymerized hydrogels and weirs within microfluidic systems: Application to DNA ***hybridization***
AU Seong, Gi Hun; Zhan, Wei; Crooks, Richard M.
CS Department of Chemistry, Texas A&M University, College Station, TX, 77842-3012, USA
SO Analytical Chemistry (2002), 74(14), 3372-3377 CODEN: ANCHAM; ISSN: 0003-2700
PB American Chemical Society
DT Journal
LA English
AB This paper describes fabrication of serial microchamber arrays within the channels of a microfluidic device. The chambers are defined using a combination of weirs and UV-cross-linked hydrogel plugs (poly(ethylene glycol) diacrylates). This approach permits the microchambers to be addressed by pump-driven pressure in one dimension and by electrophoresis in the other. The function of the device is demonstrated by detecting DNA targets. Single-strand DNA (ssDNA) probes labeled with biotin were immobilized onto microbeads coated with streptavidin. The DNA-functionalized microbeads were packed into each of three microchambers by injection through inlet wells. Three oligonucleotides were designed as probes and four as targets. ***Hybridization*** reactions were performed by moving the targets across the array of probe-contg. microchambers by electrophoresis. The ***hybridization*** of fluorescein-labeled ssDNA targets to complementary probes was obsd. by fluorescence microscopy. These studies resulted in four key observations: (1) there was no detectable binding of targets to noncomplementary probes; (2) ***hybridization*** was 90% complete within 1 min; (3) once ***captured*** , the targets could be independently ***released*** and recovered from the microbeads by treatment with 0.1 N NaOH; (4) multiple analyses could be performed using a single bead set, but there was degrdn. in performance after each ***capture*** / ***release*** cycle.
RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:249110 CAPLUS <<LOGINID::20071120>>
DN 137:150755
TI DNA ***hybridization*** at microbeads with cathodic stripping voltammetric detection
AU Palecek, E.; Billova, S.; Havran, L.; Kizek, R.; Miculkova, A.; Jelen, F.
CS Institute of Biophysics, Academy of Sciences of the Czech Republic, Brno, 61265, Czech Rep.
SO Talanta (2002), 56(5), 919-930 CODEN: TLNTA2; ISSN: 0039-9140
PB Elsevier Science B.V.

DT Journal
LA English
AB In electrochem. DNA ***hybridization*** sensors generally a single-stranded probe DNA was immobilized at the electrode followed by ***hybridization*** with the target DNA and electrochem. detection of the ***hybridization*** event at the same electrode. In this type of expts. nonspecific adsorption of DNA at the electrode caused serious difficulties esp. in the case of the anal. of long target DNAs. We propose a new technol. in which DNA is ***hybridized*** at a surface H and the ***hybridization*** is detected at the detection electrode (DE). This technol. significantly extends the choice of ***hybridization*** surfaces and DEs. Here we use paramagnetic Dynabeads Oligo(dT)25 (DBT) as a transportable reactive surface H and a hanging mercury drop electrode as DE. We describe a label-free detection of DNA and RNA (selectively ***captured*** at DBT) based on the detn. of adenines (at ppb levels, by cathodic stripping voltammetry) ***released*** from the nucleic acids by acid treatment. The DNA and RNA nonspecific adsorption at DBT is negligible, making thus possible to detect the ***hybridization*** event with a great specificity and sensitivity. Specific detection of the ***hybridization*** of polyribonucleotides, mRNA, oligodeoxynucleotides, and a DNA PCR product (226 base pairs) is demonstrated. New possibilities in the development of the DNA ***hybridization*** sensors opened by the proposed technol., including utilization of catalytic signals in nucleic acid detn. at mercury (e.g. signals of osmium complexes covalently bound to DNA) and solid DEs (e.g. using enzyme-labeled antibodies against chem. modified DNAs) are discussed.
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:213758 CAPLUS <<LOGINID::20071120>>
DN 136:213171
TI Liposome-enhanced test device and method
IN Durst, Richard Allen; Montagna, Richard A.; Baumner, Antje J.; Siebert, Sui Ti A.; Rule, Geoffrey S.
PA Cornell Research Foundation, Inc., USA; Innovative Biotechnologies International, Inc.
SO U.S., 30 pp., Cont.-in-part of U.S. 5,958,791. CODEN: USXXAM
DT Patent
LA English
FAN.CNT 4 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI US 6358752 B1 20020319 US 1999-315576 19990520 US 5958791 A 19990928 US 1996-722901 19960927 WO 2000072019 A2 20001130 WO 2000-US13592 20000518 WO 2000072019 A3 20010913 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1996-722901 A2 19960927 US 1998-86190P P 19980521 US 1998-106122P P 19981029 US 1999-315576 A 19990520
AB A test device and method for detecting or quantifying an analyte in a test sample employs an interdigitated electrode array and electroactive marker-encapsulating liposomes for signal generation and detection. The test device includes a contact portion on a first absorbent material, a ***capture*** portion either on the first absorbent material, or on a second absorbent material in fluid flow contact with the first absorbent material. The ***capture*** portion has a binding material specific for a portion of the analyte bound thereto. The device further includes an electrode array including first and second conductors each having a plurality of fingers, wherein the fingers of the conductors are interdigitated. The electrode array is positioned to induce redox cycling of an electroactive marker ***released*** either in or beyond the ***capture*** portion, depending upon whether direct (proportional) or indirect (inversely proportional) detection or measurement is desired. In the method of the invention, the test sample is applied to the contact portion, and allowed to migrate along the absorbent material(s) into the ***capture*** portion. Either before or after the migration, the test sample is contacted with a conjugate of liposomes and a second binding material for the analyte. To the extent that analyte is present in the sample, the conjugate is bound in the ***capture*** portion. By applying a voltage across the conductors, redox cycling of the marker is induced and a current is generated.
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:185418 CAPLUS <<LOGINID::20071120>>
DN 136:227918
TI Identification of genetic polymorphism by analysis of base analog incorporation into PCR products
IN Stanton, Vincent P., Jr.; Wolfe, Jia Liu; Kawate, Tomohiko; Verdine, Gregory L.
PA Variagenics, Inc., USA
SO PCT Int. Appl., 245 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 7 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI WO 2002021098 A2 20020314 WO 2001-US27446 20010904 WO 2002021098 A3 20020613 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 6500650 B1 20021231 US 2000-655104 20000905 AU 200190616 A 20020322 AU 2001-90616 20010904
PRAI US 2000-655104 A 20000905 US 1998-102724P P 19981001 US 1999-149533P P 19990817 US 1999-394387 A2 19990910 US 1999-394457 A2 19990910 US 1999-394467 A2 19990910 US 1999-394774 A2 19990910 WO 2001-US27446 W 20010904
AB The present invention relates to methods for the detection of polymorphism in polynucleotides by using

hybridization of fragments of segments of a polynucleotide suspected of contg. a polymorphism with an oligonucleotide having a sequence complementary to a fragment identifying the polymorphism and subsequent detection of incorporated labels in the oligonucleotide-fragment duplex. A method of identifying genetic polymorphisms by PCR is described. A sequence contg. a polymorphic site is amplified by PCR using an analog of a nucleotide found at the polymorphic site. The nucleotide analog is preferably chem. labile and includes a reporter moiety such as a radionuclide or fluorescent dye and the amplification products are cleaved with an appropriate reagent. Alternatively, labeling may occur at cleavage. Cleavage products are analyzed by ***hybridization*** and ***elution*** properties. Cleavage products are ***hybridized*** with a longer nucleic acid and selectively thermally ***eluted*** . The ***eluted*** products are analyzed to identify the polymorphism.

L10 ANSWER 13 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:181000 CAPLUS <<LOGINID::20071120>>
DN 136:227900
TI Microarray ***hybridization*** using pools of similar sequences and a secondary probe to detect ***hybridization*** by generation of a signal in the linear range of the detector
IN Alfenito, Mark R.
PA Hyseq, Inc., USA
SO U.S., 47 pp. CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI US 6355419 B1 20020312 US 1998-67317 19980427
PRAI US 1998-67317 19980427
AB Methods of using DNA microarray ***hybridization*** to analyze patterns of gene expression or for DNA sequencing that generate ***hybridization*** signals in the linear range of the detector are described. The method involves ***hybridizing*** nucleic acids against an immobilized array followed by ***hybridization*** with labeled probes that ***hybridize*** adjacent to the immobilized probe. The probes are then ligated and the test nucleic acids are ***eluted*** . The signal generated by the ligated probes is then detd. Such methods allow ***hybridization*** conditions, such as time, temp., ionic strength, etc., to be adjusted to increase the likelihood that ***hybridization*** to the nucleic acids within each pool is within the linear range of detection (i.e., detectable but not satg.). The methods rely on pooling nucleic acids derived from a sample, based on the degree of representation within the sample, i.e., nucleic acids having similar degrees of representation within in a sample are combined into a pool. The invention also provides arrays and kits produced from pooled nucleic acids, and an improved method for identifying a nucleic acid and/or its representation in a sample.
RE.CNT 132 THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 14 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:51339 CAPLUS <<LOGINID::20071120>>
DN 136:113766
TI Improved stability of ***hybridization*** interactions in dipstick assays using probes containing non-base pairing nucleotide spacers
IN Lee, Helen; Dineva, Magda Anastassova
PA UK
SO PCT Int. Appl., 48 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI WO 2002004122 A2 20020117 WO 2001-GB3047 20010706 WO 2002004122 A3 20021227 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 200169292 A 20020121 AU 2001-69292 20010706
PRAI GB 2000-16812 A 20000707 GB 2000-16836 A 20000707 WO 2001-GB3047 W 20010706
AB The use of nucleic acid probes contg. non-complementary nucleotides is described for dipstick assays to test for the presence of a target nucleic acid in a sample soln. The probes have greater affinity for target nucleic acid and can be used in ***capture*** and/or detection of target nucleic acid. The sensitivity of target nucleic acid detection is thereby increased. Thus, a dipstick is used to detect single-stranded or double-stranded Chlamydia trachomatis DNA in a sample urine sample. The dipstick comprises a strip of nitrocellulose having a contact end for contacting the sample soln., and a ***capture*** probe immobilized at a ***capture*** zone of the nitrocellulose strip remote from the contact end. An anti-biotin antibody dye conjugate (or an anti-fluorescein antibody-dye conjugate) is ***releasably*** immobilized at a conjugate zone of the nitrocellulose strip located between the contact end and the ***capture*** zone. The ***capture*** probe is capable of ***hybridizing*** to a first region of one strand of the target nucleic acid. A detection probe capable of ***hybridizing*** to the target nucleic acid is added (together with a helper probe capable of ***hybridizing*** to the target nucleic acid adjacent to the region recognized by the detection probe and or the ***capture*** probe). The detection probe is coupled to biotin (or to fluorescein). As the sample soln. passes the conjugate zone, it mobilizes the anti-biotin antibody-dye conjugate, which can then bind to the biotin coupled to the detection probe ***hybridized*** to the target nucleic acid. The sensitivity of detection of ssDNA and dsDNA is significantly improved by the use of non-pairing nucleotides in the ***capture*** probe and/or detection probe. Another advantage of this is that the probe may not have to be chosen based on predictions of the secondary structure formed by the target nucleic acid, thus simplifying the choice of ***capture*** and detection probe.

L10 ANSWER 15 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:534843 CAPLUS <<LOGINID::20071120>>
DN 136:306312
TI Non-isotopic analysis of sequence specific DNA-binding proteins

AU Gao, Chunfang; Wang, Hao; Gao, Guohua; Mi, Qingmei; Kong, Xiantao
CS Clinical Immunology Center of Chinese PLA, Changzheng Hospital, Second Military Medical University, Shanghai, 200003, Peop. Rep. China
SO Shijie Huaren Xiaohua Zazhi (2001), 9(5), 499-503 CODEN: SHXZF2
PB Shijie Weichangbingxue Zazhishe
DT Journal
LA Chinese
AB The non-isotopic analyses of sequence specific DNA-binding proteins based on the specific recognition between nuclear transcription factors and consensus DNA sequences was established. For electrophoretic mobility shift assay (EMSA), nuclear ext. of interest was mixed with DigddUTP 3'-end labeled DNA to allow a complex to form. The mixt. was then electrophoresed under nondenatured conditions and transferred onto nylon membrane for chemiluminescent detection. For Southwestern anal., nuclear ext. was sepd. with SDS-PAGE and then transferred onto nitrocellulose filter, ***hybridized*** with DigdUTP 3'-end labeled DNA carrying the nucleotide sequence of interest. Nuclear proteins bound to that sequences were detected by enzymic immunol. detection. For magnetic DNA affinity purifn., oligonucleotides contg. target sequence was coupled to magnetic particles, bound proteins were ***captured*** and ***eluted*** under different conditions. Electrophoresis sepd. the protein-DNA complex from unbound DNA because of lower mobility, which could be recognized by chemiluminescent detection in EMSA. Specific DNA-binding proteins and its mol. wt. could be shown with Southwestern anal. The consensus nuclear proteins could also be shown after magnetic DNA affinity purifn. and silver staining. EMSA, Southwestern anal. and magnetic DNA affinity purifn. are three practical methods in transcriptional study of sequence specific DNA binding proteins. They are reproducible, convenient and no isotopic contamination with high specificity.

L10 ANSWER 16 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:394723 CAPLUS <<LOGINID::20071120>>
DN 136:172668
TI The suitability of packable resin-based composites for posterior restorations
AU Manhart, Juergen; Chen, Hong V.; Hickel, Reinhard
CS Department of Restorative Dentistry, Dental School of the Ludwig Maximilians University, Munich, D-80336, Germany
SO Journal of the American Dental Association, JADA (2001), 132(5), 639-645 CODEN: JADSAY; ISSN: 0002-8177
PB ADA Publishing
DT Journal
LA English
AB Packable composites, promoted for the restoration of stress-bearing posterior teeth, have ***captured*** clinicians' interest. The authors tested three packable composites (Alert, Solitaire, and SureFil), a new packable org. modified ceramic or ormocer (Definite), a ***hybrid*** composite (Tetric Ceram), and an ion- ***releasing*** composite (Ariston pHc). The modulus of elasticity was detd. and the Vickers hardness was measured. To det. the materials' depth of cure, both a scraping method and a hardness profiling method were used. The authors calcd. means and std. deviations from 10 replications of each test and used one-way anal. of variance and post hoc Tukey tests (.alpha. = .05). The materials had significant differences (P < .001) in all characteristics. Solitaire had the significantly lowest elastic modulus and microhardness; Alert had the highest values for these characteristics. Ariston pHc exhibited the significantly lowest depth of cure. There was a significant correlation between the two methods of measuring depth of cure (r2 = 0.9945; P = .021). The material group of packable composites is rather inhomogeneous in terms of mech. and phys. data. The data suggest that bulk curing of packable composites in deep cavities still is not recommendable. The clinician needs to select packable composites carefully, as it seems that not all of these materials qualify for stress-loaded posterior restorations.
RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 17 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:367824 CAPLUS <<LOGINID::20071120>>
DN 135:215865
TI Particle formation by a conserved domain of the herpes simplex virus protein VP22 facilitating protein and nucleic acid delivery
AU Normand, Nadia; Van Leeuwen, Hans; O'Hare, Peter
CS Marie Curie Research Institute, Surrey, RH8 0TL, UK
SO Journal of Biological Chemistry (2001), 276(18), 15042-15050 CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB VP22, a structural protein of herpes simplex virus, exhibits unusual trafficking properties which we proposed might be exploited in gene and protein delivery applications. To pursue the use of the protein itself for cargo delivery into cells, we developed an expression system for the C-terminal half of VP22, residues 159-301 (VP22.C1), and purified the protein in high yields. Addn. of short oligonucleotides (ODNs) induced the assembly of novel particles, which were regular spheres with a size range of 0.3 to 1.0 .mu.m in diam., incorporating both protein and ODN. Following the particles in living cells using fluorescently tagged ODNs, we show that they enter efficiently within 2-4 h, and reside stably in the cell cytoplasm for up to several days. Remarkably, however, light activation induced particle disruption and ***release*** of the protein and ODN to the nucleus and cytoplasm within seconds, a process that we have ***captured*** by time lapse microscopy. In addn. to delivering antisense ODNs, ribozymes, and RNA/DNA ***hybrids*** , the VP22.C1 protein could also be modified to include peptides or proteins. These particles have the potential for delivery of a wide range of therapeutic agents in gene therapy and vaccine development.
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:300235 CAPLUS <<LOGINID::20071120>>
DN 136:80420
TI The Isolation of Differentially Expressed mRNA Sequences by Selective Amplification via Biotin and Restriction-Mediated Enrichment
AU Schibler, Ueli; Rifat, Daniele; Lavery, Daniel J.
CS Department of Molecular Biology, University of Geneva, Geneva, CH-1211, Switz.
SO Methods (San Diego, CA, United States) (2001), 24(1), 3-14 CODEN: MTHDE9; ISSN: 1046-2023
PB Academic Press
DT Journal
LA English

AB Mol. anal. of development frequently implies the isolation and characterization of genes with specific spatial and temporal expression patterns. Several methods have been developed to identify such DNA sequences. The most comprehensive technique involves the genome-wide probing of DNA sequence microarrays with mRNA sequences. However, at present this technol. is limited to the few organisms for which the entire genome has been sequenced. Here, we describe a subtractive ***hybridization*** technique, called selective amplification via biotin and restriction-mediated enrichment (SABRE), which allows the selective amplification of cDNA fragments representing differentially expressed mRNA species. The method involves the competitive ***hybridization*** of an excess of driver cDNA fragments (D) to a trace of tester cDNA fragments (T), and the subsequent purifn. of tester homo- ***hybrids*** (in which both strands are contributed by the tester cDNA). After competitive ***hybridization*** , cDNA fragments that are more abundant in the tester than in the driver are enriched in the tester homo- ***hybrids*** . However, as the fraction of tester homo- ***hybrids*** is very small [T2/(D + T)2], their purifn. requires highly efficient procedures. In SABRE, the isolation of tester homo- ***hybrids*** is afforded by a combination of three successive steps: removal of biotinylated terminal sequences from most of the heterohybrids by S1 nuclease digestion, ***capture*** of biotinylated ***hybrids*** with streptavidin-coated paramagnetic beads, and specific ***release*** of homo- ***hybrids*** from the beads by restriction nuclease digestion. If several rounds of SABRE selection are performed in series, even relatively rare differentially expressed mRNA sequences may result in the prodn. of predominant cDNA fragments in the final tester homo- ***hybrid*** population. (c) 2001 Academic Press.
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 19 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:188860 CAPLUS <<LOGINID::20071120>>
DN 135:283662
TI Synthesis and application of circularizable ligation probes
AU Myer, Sharyn E.; Day, Darren J.
CS Victoria University of Wellington, Wellington, N. Z.
SO BioTechniques (2001), 30(3), 584-586, 588, 590, 592-593 CODEN: BTNQDO; ISSN: 0736-6205
PB Eaton Publishing Co.
DT Journal
LA English
AB We describe a PCR-based approach for the synthesis of circularizable ligation probes (CLiPs). CLiPs are single-stranded probes that consist of target-specific ends sepd. by a noncomplementary "linker" sequence. When ***hybridized*** to a target, the CLiP forms a nicked circle that may be sealed by DNA ligase only if the 5' and 3' ends show perfect Watson-Crick base pairing, thus enabling the discrimination of single nucleotide polymorphisms. Primers incorporating target sequence at their 5' end and plasmid sequence at the 3' end were used in a PCR amplification. In addn., the antisense primer was 5' labeled with biotin, and the amplification was performed in the presence of fluorescently labeled dUTP. The resulting PCR product was ***captured*** with streptavidin-coated paramagnetic beads, and the top strand, which forms the CLiP, was alkali ***eluted*** . This PCR-based method has allowed the synthesis of CLiPs that are larger and more highly labeled than has previously been possible, with ligation efficiencies similar to those of the purest chem. synthesized padlock probes. Ligations performed in the presence of cognate or mismatched sequence were analyzed by denaturing PAGE using a fluorescent DNA sequencer. Genotyping using target immobilized to nylon membranes was also performed. The CLiPs were readily able to distinguish between mutant and wild-type alleles for the common genetic disorder 21-hydroxylase deficiency. Addnl., CLiPs of different lengths were synthesized and compared.
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:15776 CAPLUS <<LOGINID::20071120>>
DN 134:222253
TI The "resin- ***capture*** - ***release*** " ***hybrid*** technique: a merger between solid- and solution-phase synthesis
AU Kirschning, Andreas; Monenschein, Holger; Wittenberg, Rudiger
CS Institut fur Organische Chemie Universitat Hannover, Hannover, 30167, Germany
SO Chemistry--A European Journal (2000), 6(24), 4445-4450 CODEN: CEUJED; ISSN: 0947-6539
PB Wiley-VCH Verlag GmbH
DT Journal; General Review
LA English
AB A review with >43 refs. A polymer-assisted org. synthesis that combines the concept of solid-phase synthesis with the idea of polymer-supported scavenging reagents has recently appeared on the chem. scene. This technique has frequently been termed the "resin- ***capture*** - ***release*** " methodol. and is initiated by the immobilization of a small mol. on a polymeric support. This intermediate is subjected to a second transformation by adding a new reaction partner in soln. This reactant plays two roles: (a) the chem. alteration of the polymer-bound intermediate and (b) the simultaneous ***release*** of this reaction product from the resin back into soln. This new concept is presented and future prospects are discussed.
RE.CNT 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 21 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:885018 CAPLUS <<LOGINID::20071120>>
DN 135:59746
TI Basic and clinical aspects of intraadrenal regulation of steroidogenesis
AU Bornstein, S. R.; Ehrhart-Bornstein, M.
CS PREB, NICHD, NIH, Bethesda, MD, 20892, USA
SO Zeitschrift fuer Rheumatologie (2000), 59(Suppl. 2), ii/12-ii/17 CODEN: ZRHMBQ; ISSN: 0340-1855
PB Steinkopff Verlag
DT Journal; General Review
LA English
AB A review with 50 refs. The adrenal gland combines essential components of the autonomic nervous system and the HPA axis in close contact. From morphol. analyses employing immunohistochem., in situ ***hybridization*** , the novel technique of laser ***capture*** microdissection, and electron microscopy, it has been has shown that the chromaffin cells of the adrenal medulla and the steroid-producing cells of the adrenal cortex are extensively intermingled and functionally interrelated. In in vitro studies, a variety of regulatory factors produced and ***released*** by the adrenal medulla were

identified as playing an important role in modulating adrenocortical function. An isolated adrenocortical cell deprived of its tissue integrity, input from the nervous system, or intercellular communication with chromaffin, vascular, and immune cells of the adrenal gland, loses its normal capacity to produce glucocorticoids and to adequately respond to the homeostatic challenges of stress. Adrenocortical cells in co-culture with chromaffin cells produced ten times more glucocorticoids than the same no. of pure adrenocortical cells and demonstrated marked up-regulation in the mRNA expression of cytochrome P 450 enzymes and STAR in the co-culture, while this expression was down-regulated in isolated cells. Transgenic animal models of over-expression or deletion of enzymes involved in catecholamine synthesis, as well as of altered function of components of the HPA axis, provide evidence that the mutual interdependence of the sympatho-adrenal system and the HPA axis at the level of the adrenal gland is of physiol. relevance in vivo. Alterations in intercellular communications, local prodn. of neuropeptides, growth factors and cytokines, and aberrant expression of ectopic receptors on adrenal cells have been implicated in adrenal cell growth, development, hyperplasia, tumor formation, autonomous hormone prodn., and autoimmune disease. Moreover, we described a direct cellular interaction of lymphocytes with adrenal cells as a novel non-cytokine mediated mechanism of immune endocrine interactions. Highlighting the importance of the extra-pituitary mechanisms of adrenocortical regulation, be them neural or immune, is a worthwhile starting point for a more complete anal. of the human stress system in vivo.
RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 22 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:842376 CAPLUS <<LOGINID::20071120>>
DN 134:14901
TI Liposome-enhanced test device and method
IN Durst, Richard Allen; Montagna, Richard A.; Baumner, Antje J.; Siebert, Sui Ti A.; Rule, Geoffrey S.
PA Cornell Research Foundation, Inc., USA; Innovative Biotechnologies International, Inc.
SO PCT Int. Appl., 57 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI WO 2000072019 A2 20001130 WO 2000-US13592 20000518 WO 2000072019 A3 20010913 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 6358752 B1 20020319 US 1999-315576 19990520
PRAI US 1999-315576 A 19990520 US 1996-722901 A2 19960927 US 1998-86190P P 19980521 US 1998-106122P P 19981029
AB A test device and method for detecting or quantifying an analyte in a test sample employs an interdigitated electrode array and electroactive marker-encapsulating liposomes for signal generation and detection. The test device includes a contact portion on a first absorbent material, a ***capture*** portion either on the first absorbent material, or on a second absorbent material in fluid flow contact with the first absorbent material. The ***capture*** portion has a binding material specific for a portion of the analyte bound thereto. The device further includes an electrode array including first and second conductors each having a plurality of fingers, wherein the fingers of the conductors are interdigitated. The electrode array is positioned to induce redox cycling of an electroactive marker ***released*** either in or beyond the ***capture*** portion, depending upon whether direct (proportional) or indirect (inversely proportional) detection or measurement is desired. In the method of the invention, the test sample is applied to the contact portion, and allowed to migrate along the absorbent material(s) into the ***capture*** portion. Either before or after the migration, the test sample is contacted with a conjugate of liposomes and a second binding material for the analyte. To the extent that analyte is present in the sample, the conjugate is bound in the ***capture*** portion. By applying a voltage across the conductors, redox cycling of the marker is induced and a current is generated. Cryptosporidium parvum hsp70 mRNA was detected using immobilized probe test strips placed on interdigitated ultramicroelectrode arrays. Liposomes coupled to specific oligonucleotides were used in the enhancement.

L10 ANSWER 23 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:829673 CAPLUS <<LOGINID::20071120>>
DN 134:37160
TI Determination of immunoreactive gonadotropin-***releasing*** hormone in serum and urine by on-line immunoaffinity capillary electrophoresis coupled to mass spectrometry
AU Guzman, N. A.
CS Bioanalytical Drug Metabolism, The R.W. Johnson Pharmaceutical Research Institute, Raritan, NJ, 08896, USA
SO Journal of Chromatography, B: Biomedical Sciences and Applications (2000), 749(2), 197-213 CODEN: JCBBEP; ISSN: 0378-4347
PB Elsevier Science B.V.
DT Journal
LA English
AB The need for urgent diagnoses has propelled the development of automated analyses that can be performed in a short time at reasonable cost. One such method is immunoaffinity capillary electrophoresis. This emerging ***hybrid*** technol. employs two powerful techniques coupled online for the direct and rapid detn. of analytes present in biol. fluids. The first technique, immunoaffinity, is used for the selective extn. of a mol. present in a complex matrix, utilizing a microscale-format chamber affinity device. An analyte (affinity target) present in serum or urine is ***captured*** by an immobilized mol. recognition antibody mol. (affinity ligand) bound to a solid support constituent (glass beads or an appropriate porous structure) of a microchamber affinity device. The second technique, capillary electrophoresis, is used for the high-resoln. anal. sepn. of the purified and concd. affinity target material after ***elution*** from the microchamber affinity device. In this work, immunoaffinity capillary electrophoresis was developed for the identification and characterization of a single constituent of a complex matrix. Immunoreactive gonadotropin-***releasing*** hormone was detd. in serum and urine specimens derived from a normal individual and from a patient suffering from benign prostatic hyperplasia. Furthermore, the online immuno-sepn. system was coupled in tandem to mass

spectrometry to obtain mol. mass information of the affinity isolated and CE sepd. neuropeptide. This ***hybrid*** immuno-anal. technol. is simple, rapid, selective and sensitive. In addn., an attempt was also made to characterize other urinary constituents by CE-MS that may lead to marker activity in the urine of the diseased subject. The hyphenation of anal. techniques has proved valuable in enhancing their individual features. The future of bioanal. using miniaturized affinity systems is discussed in this paper.
RE.CNT 117 THERE ARE 117 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 24 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:635299 CAPLUS <<LOGINID::20071120>>
DN 133:247744
TI Mass spectrometry of single-stranded restriction fragments ***captured*** by an undigested complementary sequence
AU Chiu, Normal H. L.; Tang, Kai; Yip, Ping; Braun, Andreas; Koster, Hubert; Cantor, Charles R.
CS Sequenom Inc., San Diego, CA, 92121, USA
SO Nucleic Acids Research (2000), 28(8), e31, ii-iv CODEN: NARHAD; ISSN: 0305-1048
PB Oxford University Press
DT Journal
LA English
AB In this report, the authors describe a simple and accurate method to analyze restriction fragments using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. The two complementary strands of restriction fragments are sepd. through ***hybridization*** to a ***capture*** probe, which is a single-stranded undigested fragment. Using the biotin-streptavidin linkage, the ***hybrid*** is immobilized on streptavidin-coated magnetic beads. After conditioning the ***capture*** restriction fragments, they are ***eluted*** from the probe and their mol. wts. are detd. The proposed method greatly improves the quality, and reduces the complexity of the mass spectrum by analyzing only one of the complementary strands of restriction fragments.
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 25 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:569006 CAPLUS <<LOGINID::20071120>>
DN 134:25833
TI Cooperative oligonucleotides in purification of cycle sequencing products
AU Blomstergren, A.; O'Meara, D.; Lukacs, M.; Uhlen, M.; Lundeberg, J.
CS Royal Institute of Technology (KTH), Stockholm, Swed.
SO BioTechniques (2000), 29(2), 352-354, 356, 358, 360, 362-363 CODEN: BTNQDO; ISSN: 0736-6205
PB Eaton Publishing Co.
DT Journal
LA English
AB Nucleic acid ***hybridization*** is an essential component in many of today's std. mol. biol. techniques. In a recent study, we investigated whether nucleic acid ***capture*** could be improved by taking advantage of stacking ***hybridization*** , which refers to the stabilizing effect that exists between oligonucleotides when they ***hybridize*** in a contiguous tandem fashion. Here, we describe a specific approach for purifn. of sequencing products using cooperative probes that ***hybridize*** to single-strand targets where one of the probes has been coupled to a magnetic bead. This approach has been developed for std. sequencing primers and has been applied to shotgun plasmid libraries. The cooperative probes have been designed to anneal within the common vector sequence and to avoid co-purifn. of nonextended sequencing primers and misprimed sequencing products. The reuse of magnetic beads, together with salt independent ***elution*** , makes the approach suitable for high-capacity capillary electrophoresis instruments.
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 26 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:476612 CAPLUS <<LOGINID::20071120>>
DN 133:345215
TI Development of a novel, rapid integrated Cryptosporidium parvum detection assay
AU Kozwich, Diane; Johansen, Kristine A.; Landau, Keli; Roehl, Christopher A.; Woronoff, Sam; Roehl, Patrick A.
CS Xtrana Inc., Denver, CO, 80230, USA
SO Applied and Environmental Microbiology (2000), 66(7), 2711-2717 CODEN: AEMIDF; ISSN: 0099-2240
PB American Society for Microbiology
DT Journal
LA English
AB The aim of this study was to develop a reverse transcription-PCR assay and lateral flow detection protocol for specific identification of Cryptosporidium parvum. The method which we developed is sensitive and specific and has a low limit of detection. In our protocol a solid phase material, the Xtra Bind ***Capture*** System, was used for extn. and purifn. of double-stranded RNA (dsRNA) specific for C. parvum. The Xtra Bind ***Capture*** System interfaced with pellets concd. from water samples collected with previously developed filtration devices. The pellets were resuspended in reagent water (final vol., 0.5 mL), and an equal amt. of rupture buffer and the Xtra Bind ***Capture*** System was added to the resuspended pellet mixt. The dsRNA target sequences in a 0.5-mL portion were ***captured*** by the solid phase material via ***hybridization*** . The debris and potential inhibitors were removed by washing the Xtra Bind material several times with buffer. The Xtra Bind material with its bound dsRNA was added directly to an amplification reaction mixt., and the target was amplified without ***elution*** from the Xtra Bind material. A PCR was performed in the presence of the Xtra Bind ***Capture*** System, which resulted in robust amplification of the target. The detection system which we used was adapted from lateral flow chromatog. methods typically used for antigen-antibody reactions. The result was a colored line that was visible if the organism was present. When this method was used, we were able to reproducibly and correctly identify 10 oocysts added to 0.5 mL of reagent water. When the protocol was evaluated with a small set of environmental samples, the level of detection was as low as 1 oocyst/L. The total time from resuspension of the pellet to detection was about 3 h, which is considerably less than the 5 h required for immunomagnetic sepn. followed by an indirect immunofluorescence assay and microscopy.
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 27 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:260583 CAPLUS <<LOGINID::20071120>>
DN 132:304258
TI ***Hybridisation*** assay involving nuclease-probe conjugates and immobilization of probe or probe-target complexes
IN Harbron, Stuart
PA UK
SO PCT Int. Appl., 46 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI WO 2000022165 A1 20000420 WO 1999-GB3383 19991012 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2356613 A1 20000420 CA 1999-2356613 19991012 AU 9962187 A1 20000501 AU 1999-62187 19991012 GB 2346694 A 20000816 GB 1999-24169 19991012 GB 2346694 B 20010124 EP 1121463 A1 20010808 EP 1999-949210 19991012 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002527078 T 20020827 JP 2000-576055 19991012 US 2002090617 A1 20020711 US 2001-833918 20010413
PRAI GB 1998-22067 A 19981012 WO 1999-GB3383 W 19991012 US 1999-403105 A2 19991014
AB The present invention provides a method for detecting a single-stranded target nucleic acid comprising the steps of: (a) forming a ***hybrid*** between a target nucleic acid and a nucleic acid probe, said nucleic acid probe labeled with an enzyme reagent which hydrolyzes single-stranded nucleic acid but is substantially without effect on double-stranded nucleic acid, said ***hybrid*** formed under conditions of pH which are outside the activity range of said enzyme reagent; (b) adjusting said pH to a value within the activity range of said enzyme reagent, whereby said enzyme reagent substantially hydrolyzes any single-stranded nucleic acid present; and (c) contacting said ***hybrid*** with a detection reagent to detect the ***hybrid*** . Prior to step (c) the nucleic acid probe or ***hybrid*** is brought into contact with a solid support to attach it thereto, or the nucleic acid probe or ***hybrid*** is brought into contact with a ***capture*** reagent, optionally linked to a solid support, to ***capture*** the nucleic acid probe or ***hybrid*** ; and the ***capture*** reagent or solid support on which the ***hybrid*** is immobilized is washed with a washing fluid while the ***capture*** reagent or solid support is contained within a vessel that is adapted to retain the ***capture*** reagent or solid support but not to retain fluid in which the ***capture*** reagent or solid support is dispersed, whereby material which has not been ***captured*** by the ***capture*** reagent or otherwise immobilized on a solid support is ***eluted*** from the vessel.
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 28 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:224461 CAPLUS <<LOGINID::20071120>>
DN 133:29449
TI Induction of interferon .gamma. in human gingival fibroblasts challenged with phytohaemagglutinin
AU Mustafa, Manal; Wondimu, Biniyam; Bakhiet, Moiz; Modeer, Thomas
CS Department of Pediatric Dentistry, Faculty of Odontology, Karolinska Institutet, Huddinge, Swed.
SO Cytokine (2000), 12(4), 368-373 CODEN: CYTIE9; ISSN: 1043-4666
PB Academic Press
DT Journal
LA English
AB Interferon gamma (IFN-.gamma.) is a potential immunoregulatory cytokine, which is secreted mainly by cells of immune origin. In this study, the authors examd. the capacity of human gingival fibroblasts as non-professional immune cells to express IFN-.gamma. mRNA and to produce the protein. Cultures of fibroblast cells were established from gingival biopsies from three children. The expression of mRNA for IFN-.gamma. was studied by in situ ***hybridization*** , and the level of IFN-.gamma. was detd. by cell- ***released*** ***capturing*** ELISA. Treatment of the cells with phytohemagglutinin (PHA) (2.5, 5.0, and 10 mg/mL) increased the no. of IFN-.gamma. mRNA expressing cells and the protein prodn. at 1, 6, and 24 h. Non-stimulated cells did not reveal measurable levels of IFN-.gamma. mRNA or the protein. The inflammatory cytokines interleukin 1.beta. (IL-1.beta.) (100 pg/mL) and tumor necrosis factor .alpha. (TNF.alpha.) (10 ng/mL) did not affect IFN-.gamma. mRNA expression or protein prodn. Treatment of the cells with 1 .mu.M phorbol 12-myristate-13-acetate (PMA) stimulated IFN-.gamma. mRNA expression but had no effect on IFN-.gamma. protein prodn. The authors conclude that human gingival fibroblasts not only transcribe IFN-.gamma. mRNA but also produce the IFN-.gamma. protein in response to PHA. The finding that human gingival fibroblasts, produce the cytokine IFN-.gamma., further support the concept that these cells take an active part in the modulation of the inflammatory and immune response in the periodontal tissue. (c) 2000 Academic Press.
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 29 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:121614 CAPLUS <<LOGINID::20071120>>
DN 132:147596
TI Detection and isolation of nucleic acid sequences using probes labeled with affinity and reporter groups
IN Lucas, Joe N.; Straume, Tore; Bogen, Kenneth T.
PA The Regents of the University of California, USA
SO U.S., 13 pp. CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI US 6027879 A 20000222 US 1995-513160 19950809
PRAI US 1995-513160 19950809
AB A method for detecting and isolating a target sequence in a sample of nucleic acids is provided using a ***hybridization*** probe capable of ***hybridizing*** to the target sequence

and that includes a detectable marker and an affinity label. ***Hybrids*** between the probe and the target can be ***captured*** using the affinity label and quantified by measuring the detectable marker. The complex can be processed in different ways to ***release*** the target DNA, e.g. for cloning, or to ***release*** the detectable marker for quantitation. A kit is also provided for detecting a target sequence in a sample of nucleic acids using a bifunctional ***hybridization*** probe according to this method.
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 30 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:44922 CAPLUS <<LOGINID::20071120>>
DN 132:219086
TI PNA on particles for DNA ***capture***
AU Beck, Frederik; Adelhorst, Kim; Petersen, Kenneth H.; Winter, Lars; Farmer, Jeffrey
CS DAKO, Glostrup, DK-2600, Den.
SO Innovation and Perspectives in Solid Phase Synthesis & Combinatorial Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic Chemical Diversity, Collected Papers, International Symposium, 5th, London, Sept. 2-6, 1997 (1999), Meeting Date 1997, 259-262. Editor(s): Epton, Roger. Publisher: Mayflower Scientific Ltd., Kingswinford, UK. CODEN: 68OEAA
DT Conference
LA English
AB Today detection of low copy bacteria or viruses is normally accomplished through target amplification such as PCR and LCR. Although these techniques have improved tremendously over the last couple of years, they are still sensitive to contamination and are also very time-consuming. One measure to reduce contamination is to improve sample prepn. This can be done by particle-based ***capture*** of the target prior to amplification. In this technique, particles coated with DNA complementary to the target is allowed to ***hybridize*** to the target, excess sample is removed, and target is either assayed directly on the particles, or ***eluted*** for subsequent anal. In order to improve the ***capture*** and detection of low copy targets using this type of approach, the availability of specific ***capture*** probes possessing higher affinity for target than conventional oligos would provide a distinct advantage. One such type of probes are the so-called peptide nucleic acids (PNAs). These analogs of DNA, in which the charged deoxyribonucleotide phosphate backbone has been replaced by a neutrally charged N-aminoethylglycine backbone, have been reported to bind nucleic acid targets with higher affinity and specificity than conventional oligo probes. In the present study, we have investigated the feasibility of coupling PNAs to latex microparticles.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 31 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:673101 CAPLUS <<LOGINID::20071120>>
DN 131:296194
TI Nucleic acid sequencing using rolling circle-based amplification and arrays of ***capture*** probes
IN Taylor, Seth
PA Packard Bioscience Company, USA
SO PCT Int. Appl., 64 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE
PI WO 9953102 A1 19991021 WO 1999-US8407 19990416 W: AU, CA, JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9935670 A 19991101 AU 1999-35670 19990416 US 2002168645 A1 20021114 US 2001-884425 20010619
PRAI US 1998-82063P P 19980416 US 1998-84085P P 19980507 US 1999-293333 B1 19990416 WO 1999-US8407 W 19990416
AB A method of DNA sequence anal. that uses a combination of isothermal amplification by a rolling circle method and ***hybridization*** of amplification products to ordered arrays of ***capture*** probes is described. The method can be used for sequencing and for detection of polymorphisms, esp. single nucleotide polymorphisms. The method uses a primer that ***hybridizes*** on the 5'- and 3'-sides of a target sequence to form a gapped circle. The ***hybridization*** product is then amplified from a rolling circle amplification primer site and the amplification products are cleaved with a restriction enzyme to ***release*** the sequence of the target DNA that has been incorporated into the amplification products. The restriction enzyme is preferably a type IIS that has a cleavage site near the gap that is filled in during amplification.
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 32 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:600837 CAPLUS <<LOGINID::20071120>>
DN 131:285017
TI A novel serological technique: polymerase chain reaction enhanced immunoassay. Application to enterovirus IgM diagnosis
AU Aspholm, Robert; Zuo, Shusheng; Fohlman, Jan; Frisk, Gun; Friman, Goran; Blomberg, Jonas
CS Section of Virology, Department of Medical Sciences, Uppsala University Hospital, Uppsala, S-751 85, Swed.
SO Journal of Virological Methods (1999), 80(2), 187-196 CODEN: JVMEDH; ISSN: 0166-0934
PB Elsevier Science B.V.
DT Journal
LA English
AB The polymerase chain reaction (PCR) method is a sensitive, specific and rapid technique for virus detection. The principles of a PCR enhanced immunoassay (PIA) are described. The method combines solid phase serol. techniques with the PCR, providing a versatile and sensitive method for antibody detection. By linking the antigenicity of virus particles with their content of nucleic acid, the method provides new possibilities for virus serol.: for example, antibody specificity can be coupled to viral sequence in patients with chronic infections caused by highly variable viruses such as HIV and HCV. An application of the PIA technique is described for the detection of anti-enterovirus IgM. IgM is ***captured*** to anti-human IgM-coated microwell plates. The anti-enterovirus IgM is allowed to bind crude enterovirus antigen. Bound virus is heat denatured and the ***released*** RNA is used as a template for reverse transcription PCR (RT-PCR) amplification. Amplicons are detected by ***hybridization*** to an affinity labeled probe in a microwell colorimetric assay. In a pilot study, 18 serum specimens from patients with enterovirus infections were examd. Using a mixt. of ten crude enterovirus antigens, the frequency of IgM positivity was 6/18 (33%). Titers

between 1/500 and 1/100 000 were recorded. Predominantly type-specific antibodies were detected. The results were compared with a procapsid enterovirus RIA (RIA). After further optimization, the PIA has the potential to be a clin. useful assay for the detection of antiviral antibodies.
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 33 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:591517 CAPLUS <<LOGINID::20071120>>
DN 131:307509
TI Conjugation of DNA to plasma-treated polymer surfaces and their application to multiplex DNA sequencing
AU Lambert, Stephen M.; Chen, Jer-Kang; Chiesa, Claudia; Fry, George A.; Furniss, Vergine C.; Mehrpouyan, Majid A.; O'Neill, Roger A.
CS PE Applied Biosystems, Foster City, CA, 94404, USA
SO Materials Research Society Symposium Proceedings (1999), 544(Plasma Deposition and Treatment of Polymers), 57-62
CODEN: MRSPDH; ISSN: 0272-9172
PB Materials Research Society
DT Journal
LA English
AB Plasma treatment and deposition techniques have been used to facilitate the covalent attachment of DNA to polymer surfaces. The variety of surface functional groups that can be created by plasma techniques enables different chem. conjugation routes to be explored. For example, a phosphodiester linkage can be used for surfaces with hydroxyl groups. Likewise, a carboxyamide linkage can be used for surfaces with carboxyl or amine groups. The primary application of the engineered materials has been the ***hybridization*** -based sepn. of multiplexed DNA sequencing products. Traditionally, sequencing reactions are performed individually on single templates. Multiplex sequencing offers reagent and time savings by permitting multiple sequencing reactions on single or multiple templates. The method developed uses recoverable DNA sequencing primers with addnl. " ***capture*** sequences" attached to the 5' end. The ***capture*** sequences are designed to be complementary to "binding sequences" covalently attached to the plasma-treated polymer supports. When a soln. of the extended recoverable primers is exposed to a polymer support, primers with complementary ***capture*** sequences ***hybridize*** to the immobilized binding sequences. Contacting a multiplexed sample with a series of solid supports (each having a different binding sequence) selectively removes each set of sequencing products from the mixt. Washing each solid support, followed by ***releasing*** the ***hybridized*** DNA, results in isolated and purified sequencing products that are amenable to anal. by gel or capillary electrophoresis.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 34 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:514897 CAPLUS <<LOGINID::20071120>>
DN 131:267674
TI Detection of nucleic acids by cycling probe technology on magnetic particles: high sensitivity and ease of separation
AU Bhatt, Ram; Scott, Brad; Whitney, Scott; Bryan, Robert N.; Cloney, Lynn; Lebedev, Alexandre
CS ID Biomedical, Inc., San Diego, CA, 92121, USA
SO Nucleosides & Nucleotides (1999), 18(6 & 7), 1297-1299
CODEN: NUNUD5; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal
LA English
AB Cycling Probe Technol. (CPT) is a signal amplification system that allows detection of nucleic acid target sequences without target amplification. CPT employs a sequence specific chimeric probe, typically DNA-RNA-DNA, which ***hybridizes*** to a complementary target DNA sequence and becomes a substrate for RNase H. Cleavage occurs at the RNA internucleotide linkages and results in dissocn. of the probe from the target, thereby making it available for the next probe mol. This communication describes the use of oligonucleotides attached to solid supports for target ***capture*** and ***release*** followed by soln. and solid phase cycling. Through the attachment of chimeric probes to Sera-Mag magnetic particles (SMP) a simple and effective method of sepg. the cleaved probe from non-cycled probe has been developed. By ***capturing*** the target DNA on particles and sepg. it from the extraneous non-specific DNA we are able to dramatically reduce background and thus discriminate between samples of Methicillin Resistant (MRSA) and Methicillin Sensitive (MSSA) Staphylococcus aureus. We conjugated oligonucleotide probes to SMPs (.apprx.1 um) and Nylon beads (NB) which were coated with ID Biomedical's proprietary coating materials (R, patent pending).

L10 ANSWER 35 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:496875 CAPLUS <<LOGINID::20071120>>
DN 132:77697
TI A novel chemiluminescence-based ***hybridization*** assay for Listeria monocytogenes
AU Sigmund, H. F.; Togel, M.
CS Mediators Diagnostika GesmH, Vienna, A-1110, Austria
SO Bioluminescence and Chemiluminescence: Perspectives for the 21st Century, Proceedings of the International Symposium on Bioluminescence and Chemiluminescence, 10th, Bologna, Sept. 4-8, 1998 (1999), Meeting Date 1998, 118-121. Editor(s): Roda, Aldo. Publisher: Wiley, Chichester, UK. CODEN: 67YCAD
DT Conference
LA English
AB The food-borne human pathogen Listeria monocytogenes (LM) has caused several outbreaks of Listeriosis in the past, which makes regular food screening for the presence of LM mandatory. Currently, procedures to detect LM need at least 2 days of bacterial growth in selective medium and laborious identification by microbiol. or biochem. means. We now have established a highly sensitive chemiluminescence assay which allows the rapid detection of LM after 1 day of growth in selective medium. Bacteria are first treated enzymically and finally get lysed by a soln. contg. chaotropic reagents. The highly abundant rRNA ***released*** by these steps is sandwich-***hybridized*** between the immobilized ***capture*** probe and the detection probe. After washing off cell debris as well as unbound rRNA and detection probe, an anti-fluorescein-alk. phosphatase conjugate is bound to the sandwich-***hybrids*** . Following removal of excess antibody conjugate, a luminogenic substrate is added which forms an excited intermediate capable of luminescence upon cleavage of an phosphate group by the antibody conjugate. The generated light measured in a luminometer is a direct measure for the LM content of the sample.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 36 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:452079 CAPLUS <<LOGINID::20071120>>
DN 131:321252
TI Immunoaffinity purification of foot and mouth disease virus type specific antibodies using recombinant protein adsorbed to polystyrene wells
AU Bayry, J.; Prabhudas, K.; Bist, P.; Reddy, G. R.; Suryanarayana, V. V. S.
CS Indian Veterinary Research Institute, Bangalore, India
SO Journal of Virological Methods (1999), 81(1-2), 21-30 CODEN: JVMEDH; ISSN: 0166-0934
PB Elsevier Science B.V.
DT Journal
LA English
AB The specificity of foot and mouth disease virus (FMDV) serol. tests depends largely on the quality and purity of the antibodies used. Such type specific antibodies can be generated by ***hybridoma*** technol. Alternatively, the specific antibodies can be selected from polyclonal serum by immunoaffinity chromatog. using recombinant protein/peptide bound affinity matrixes. Based on this approach, we purified selectively antibodies against the major epitopes of VP 1 of FMDV serotype Asia 1 using recombinant protein adsorbed to polystyrene wells. Optimum buffer conditions were standardized for efficient ***elution*** . Buffer consisting of 4 M MgCl2 with 75 mM HEPES pH 6.5 was found to be optimum with respect to ***elution*** efficiency of bound antibodies and integrity of antigen. The specific reactivity of ***eluted*** antibodies was confirmed by dot-enzyme linked immunosorbent assay (dot-ELISA) and antigen ***capture*** reverse transcription polymerase chain reaction (Ag/RT-PCR). The effect of temp. and repeated ***elution*** on the stability of coated protein were studied.
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 37 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:317203 CAPLUS <<LOGINID::20071120>>
DN 130:333712
TI Specific and sensitive detection of nucleic acids by PCR and detection of amplification products by ***hybridization***
IN Kessler, Christoph; Haberhausen, Gerd; Bartl, Knut; Orum, Henrik
PA Roche Diagnostics GmbH, Germany
SO PCT Int. Appl., 47 pp. CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 4 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- --------
PI WO 9923250 A2 19990514 WO 1998-EP6961 19981103 WO 9923250 A3 19990722 W: AU, CA, JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE DE 19748690 A1 19990506 DE 1997-19748690 19971104 DE 19814001 A1 19990930 DE 1998-19814001 19980328 DE 19814828 A1 19991007 DE 1998-19814828 19980402 CA 2308762 A1 19990514 CA 1998-2308762 19981103 AU 9921521 A 19990524 AU 1999-21521 19981103 AU 741141 B2 20011122 EP 1029084 A2 20000823 EP 1998-965653 19981103 R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, IE, FI JP 2002505071 T 20020219 JP 2000-519105 19981103
PRAI DE 1997-19748690 A 19971104 DE 1998-19814001 A 19980328 DE 1998-19814828 A 19980402 WO 1998-EP6961 W 19981103
AB A rapid and sensitive method of detecting a DNA sequence by PCR amplification of short target sequences and short primers followed by ***hybridization*** with a probe specific for an internal region of the amplification product is described. One of the primers may be immobilized to ***capture*** the amplification products. and ***hybridization*** probes may be labeled with ***hybridization*** -dependent reporter groups, such as a FRET couple. The probes may be labeled with a reporter group and a quencher group, e.g. a FRET couple, with the reporter ***released*** from the ***hybrid*** by a 5'-exonuclease, esp. a DNA polymerase with a 5'-exonuclease activity. The method is suited for high-throughput screening, e.g. in blood banking.

L10 ANSWER 38 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:307273 CAPLUS <<LOGINID::20071120>>
DN 131:140122
TI Enriched full-length cDNA expression library by RecA-mediated affinity ***capture***
AU Hakvoort, Theodorus B. M.; Vermeulen, Jacqueline L. M.; Lamers, Wouter H.
CS Department of Anatomy and Embryology, Academic Medical Center, University of Amsterdam, Amsterdam, Neth.
SO BioTechniques Molecular Laboratory Methods Series (1998), 1(Gene Cloning and Analysis by RT-PCR), 259-269 CODEN: BMLSF7; ISSN: 1520-3182
PB BioTechniques Books
DT Journal
LA English
AB Multiple specific full-length cDNAs can be isolated simultaneously in 1 expt. using the triple helix-mediated affinity ***capture*** method. This method is based on the formation of triple-helical structure between labeled single-stranded DNA and double-stranded DNA mols. mediated by the RecA protein. The labeled triple-helical structure is then ***captured*** by paramagnetic particles targeted to the label. The combination of subtractive ***hybridization*** to enrich a population of cDNA fragments for up- or down-regulated gene products and the RecA-mediated affinity ***capture*** method yields a rapid and powerful procedure to prep. specific, enriched full-length cDNA expression libraries. Protocols are given for the prepn. of digoxigenin-labeled, enriched cDNA fragments, the prepn. of a full-length cDNA library, triple helix affinity ***capture*** and ***release*** of plasmid cDNAs, and propagation of the enriched full-length plasmid cDNA.
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 39 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:196577 CAPLUS <<LOGINID::20071120>>
DN 131:43266
TI Immunoassay on a single microparticle: the effect of particle size and number on a miniaturized time-resolved fluorometric assay of free prostate-specific antigen
AU Harma, Harri; Lehtinen, Paivi; Takalo, Harri; Lovgren, Timo

CS Department of Biotechnology, University of Turku, Tykistok 6, Turku, FIN-20520, Finland
SO Analytica Chimica Acta (1999), 387(1), 11-19 CODEN: ACACAM; ISSN: 0003-2670
PB Elsevier Science B.V.
DT Journal
LA English
AB Individual microparticles can be applied to miniaturize conventional immunometric and DNA ***hybridization*** assays. In the present report, the effect of particle size and no. on the performance of a non-competitive free prostate-specific antigen (PSA) assay were studied in a microliter scale vol. PSA was ***captured*** onto the surface of a microparticle by a monoclonal antibody. Particle-bound PSA was detected by time-resolved fluorometry after the ***release*** of europium ions from the europium-labeled monoclonal antibody into a fluorescence enhancement soln.; 1.8 amol of free PSA was detected in a miniaturized immunoassay by using a single microparticle. The kinetics of the multiple microparticle assay (particle diam. 4 .mu.m, 500 000 particles per assay) was rapid due to a favorable surface-to-vol. ratio. In the assay employing a single microparticle (particle diam. 920 .mu.m), the equil. was reached in 7.5 min when a total reaction vol. of 1 .mu.l was used. This study indicates that a miniaturized assay with a single microparticle as the solid phase is feasible and competitive in terms of kinetics, detection limit and dynamics as an immunoassay format.
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 40 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:185460 CAPLUS <<LOGINID::20071120>>
DN 131:68698
TI Preparative-scale isolation of multiple genes by agarose-based continuous ***elution*** electrophoresis
AU Rodriguez, H.; Akman, S. A.
CS Biotechnology Division, National Institute of Standards and Technology, Gaithersburg, MD, 20899-8311, USA
SO European Journal of Laboratory Medicine (1998), 6(3), 150-155 CODEN: EJLAEW; ISSN: 1122-8652
PB Societa Italiana di Medicina di Laboratorio
DT Journal
LA English
AB Techniques for the isolation of genes from restriction enzyme size fractionated genomic DNA are traditionally accomplished by procedures that are both time and labor intensive. Therefore, we developed a simple and efficient procedure for the isolation of genes as individual DNA fragment lengths ranging in size from 1 kb to >18 kb. Using a com. continuous ***elution*** protein electrophoresis app. and incorporating a non-toxic agarose matrix, preparative-scale amts. (300 .mu.g) of enzyme-restricted genomic DNA was size fractionated by continuous ***elution*** electrophoresis, ***capturing*** the target DNA sequence of interest. Fractions corresponding to unique fragment length ranges were then screened for individual genes by dot-blot anal. We have isolated two genes (PGK1; a single copy housekeeping gene, and p53 (exons 3-11); a tumor suppressor gene) from one preparative run, whose DNA fragment lengths ***elute*** at 4 kb and 7.5 kb resp. Although we have performed sepn. and isolation of DNA fragment lengths from 1 kb to >18 kb with high recovery yields, different fragment lengths can be isolated by varying the gel concn. in the preparative column. Advantages of this technique are that it is an easy and efficient means of large-scale isolation of DNA fragment lengths, with the added advantage of isolating multiple genes from a single preparative run. Genomic DNA fragment length purifn. by agarose matrix continuous ***elution*** electrophoresis should prove useful in research areas which require gene isolation, such as genomics and mol. biol.
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 41 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:30925 CAPLUS <<LOGINID::20071120>>
DN 130:110213
TI Parallel synthesis of 1,2,3-thiadiazoles employing a "Catch and ***Release*** " strategy
AU Hu, Yonghan; Baudart, Sylvie; Porco, John A., Jr.
CS Argonaut Technologies, San Carlos, CA, 94070, USA
SO Journal of Organic Chemistry (1999), 64(3), 1049-1051 CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
OS CASREACT 130:110213
AB A very efficient ***hybrid*** soln.-/solid phase sequence for the synthesis of 1,2,3-thiadiazoles employing "resin ***capture*** " of ketones without the need for chromatog. was developed. Cyclative cleavage of resin-bound sulfonylhydrazones was accomplished using thionyl chloride to afford 1,2,3-thiadiazoles. Stille coupling of resin-bound intermediates was also demonstrated.
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 42 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:775373 CAPLUS <<LOGINID::20071120>>
DN 130:105787
TI PCR-introduced loop structure as primer in DNA sequencing
AU Ronaghi, Mostafa; Pettersson, Bertil; Uhlen, Mathias; Nyren, Pal
CS The Royal Institute of Technology, Stockholm, Swed.
SO BioTechniques (1998), 25(5), 876, 878, 880-882, 884 CODEN: BTNQDO; ISSN: 0736-6205
PB Eaton Publishing Co.
DT Journal
LA English
AB The need for a primer ***hybridization*** step before sequencing has been eliminated using a stem-loop structure generated by PCR. The loop structure is obtained by careful design of the PCR primer or by cloning the target DNA into a dedicated vector (pRIT 28HP). After solid-phase ***capture*** of the PCR product, the loop is formed by ***elution*** of the non-bound strand. Here, we show that both the immobilized and the ***eluted*** strand can be analyzed using conventional Sanger DNA sequencing and the novel pyrosequencing method as described previously. By using a stem-loop structure as a primer for DNA sequencing, the risk for mispriming is minimized.
RE.CNT .17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 43 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:743265 CAPLUS <<LOGINID::20071120>>

DN 130:108809
TI ***Capture*** of human monoclonal antibodies from cell culture supernatant by ion exchange media exhibiting high charge density
AU Necina, Roman; Amatschek, Karin; Jungbauer, A.
CS Institute of Applied Microbiology, University of Agriculture, Forestry and Biotechnology, Vienna, A-1190, Austria
SO Biotechnology and Bioengineering (1998), 60(6), 689-698 CODEN: BIBIAU; ISSN: 0006-3592
PB John Wiley & Sons, Inc.
DT Journal
LA English
AB A shortcut purifn. sequence for therapeutic proteins should consist of three steps: ***capture*** , purifn., and polishing. Special emphasis has been put on direct ***capture*** of human monoclonal antibodies from culture supernatants with ion-exchangers avoiding pretreatment steps such as desalting, diln., and other means to reduce the ionic strength. CM-HyperD, a cation-exchanger composed of an inorg. macroporous support filled with a viscoelastic gel with a high charge d. was used. ***Capture*** of monoclonal antibodies from clarified ***hybridoma*** cell culture grown in media supplemented with fetal calf serum was investigated. Screening of different pH conditions and buffers for the load step showed that monoclonal antibodies were efficiently bound by CM-HyperD at pH 4.0 and 5.0 at an ionic strength equiv. to culture supernatant. Combination of neg. purifn. with Q-Sepharose FF and ***capturing*** with CM-HyperD gave sufficient yield and resoln. Implementation of wash steps with higher cond. did not improve the purity, but decreased the yield. Interestingly, high flow rates improved the purity. When antibodies were ***captured*** from serum-free culture supernatant the antibody could be ***eluted*** in a single peak with substantial redn. of contaminants. ***Capturing*** of antibodies by ion-exchange sorbents from culture supernatant is possible despite the high salt content.
RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 44 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:277231 CAPLUS <<LOGINID::20071120>>
DN 128:291127
TI Methods for nucleic acid detection using exonucleases, ligases, and affinity and reporter group-labeled probes
IN Murtagh, James J., Jr.; Thunnissen, Frederik B. J. M.
PA Emory University, USA
SO U.S., 55 pp., Cont.-in-part of U.S. 5,518,901. CODEN: USXXAM
DT Patent
LA English
FAN.CNT 3 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI US 5744306 A 19980428 US 1995-479723 19950607 US 5518901 A 19960521 US 1993-49264 19930419 CA 2161014 A1 19941027 CA 1994-2161014 19940419 US 5688669 A 19971118 US 1995-476562 19950607 WO 9641005 A1 19961219 WO 1996-US9208 19960606 W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML AU 9662568 A 19961230 AU 1996-62568 19960606
PRAI US 1993-49264 A2 19930419 US 1995-479723 A 19950607 WO 1996-US9208 W 19960606
AB A ***hybridization*** method (EXACCT - exonuclease amplification confirmation ***capture*** technique) for detecting a DNA sequence within a long double-stranded DNA is described. The DNA is partially digested with an exonuclease to render it partially single-stranded. An alternative method of generating single-stranded regions by amplification with primers contg. deoxyuridine and digestion with uracil DNA glycosylase is also described. The digestion products are then ***hybridized*** with an affinity labeled probe and a probe that carries a reporter group and that ***hybridizes*** adjacent to the affinity-labeled probe. The two probes are then ligated together and the ligation products ***captured*** on an affinity matrix. The target DNA is then removed by ***elution*** under denaturing conditions and excess unhybridized reporter group-labeled probe is also removed. The binding of the reporter group to the affinity matrix is then quantified.
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 45 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:163712 CAPLUS <<LOGINID::20071120>>
DN 128:201783
TI A ***hybridization*** method for detecting multiple sequences in a sample by ***release*** of immobilized bacteriophage carrying a reporter gene
IN Lin, Edmund C. C.; Parker, Breck O.
PA Symbiotech, Inc., USA
SO PCT Int. Appl., 40 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI WO 9808977 A1 19980305 WO 1997-US14958 19970826 W: CA, JP RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 6352827 B1 20020305 US 1997-908494 19970807
PRAI US 1996-25045P P 19960828
AB A ***hybridization*** method that uses the ***release*** of marked bacteriophage that have been bound by an affinity-labeled ***capture*** probe is described. The method uses immobilized ***capture*** probes to which a bacteriophage is bound either covalently or non-covalently. The bacteriophage carries a reporter gene that will lead to the development of a distinct colored plaque when plated on the appropriate medium. The ***capture*** probe contains a short ribonucleotide stretch. When the target sequence ***hybridizes*** to the ***capture*** probe, the RNA/DNA ***hybrid*** can be cleaved by RNase H. The ***capture*** probe species are mixed with a fluid sample that has been processed to ***release*** single-stranded nucleic acids that ***hybridize*** to the ***capture*** probe to form DNA/RNA or RNA/RNA duplexes. The DNA-RNA duplexes are cleaved with RNase H to ***release*** the bacteriophage.
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 46 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:138263 CAPLUS <<LOGINID::20071120>>
DN 128:290724
TI Rapid and sensitive detection of Chlamydia trachomatis using a ligatable binary RNA probe and Q.beta. replicase
AU Stefano, James E.; Genovese, Louis; An, Qi; Lu, Ling; Mccarty, Janice; Du, Yan; Stefano, Kyriaki; Burg, J. Lawrence; King, Walter; Lane, David J.
CS GENE-TRAK, Inc., Framingham, MA, 01701, USA
SO Molecular and Cellular Probes (1997), 11(6), 407-426 CODEN: MCPRE6; ISSN: 0890-8508
PB Academic Press Ltd.
DT Journal
LA English
AB A simple assay format was developed for the direct detection of C. trachomatis rRNA utilizing ligation of recombinant MDV-1 probe RNA fragments ***hybridized*** to 23S rRNA after ***capture*** and ***release*** from a solid support. Assay background (equiv. to 104 targets) was suppressed by blocking sequences in the 5' MDV reporter probe fragment complementary to the 3' fragment by prehybridization of a DNA oligonucleotide. A pair of reporter fragments bearing a deletion within the region, obtained by a hydrid-selection-amplification protocol, yielded a low level of assay background which was reduced to <2% with a blocker directed against the remaining pairing sequence. This probe set showed a sensitivity of 103 mols. of 23S rRNA (>95% responding) and could detect a single elementary body (EB) of Chlamydia trachomatis or 1-10 EB added to a clin. matrix of pooled neg. human cervical swab samples. The time of first appearance of amplification products by real-time fluorescence detection showed a linear response to log increases in the target level over a 105-fold range, permitting the detn. of target level within an order of magnitude. The assay showed .apprx. 109-fold discrimination over Chlamydia pneumoniae (TWAR) rRNA. High levels of cultured Candida albicans, Escherichia coli, Staphylococcus aureus, or Neisseria gonorrhoeae had no detectable effect on assay background or the ability to detect a single elementary body.
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 47 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:35733 CAPLUS <<LOGINID::20071120>>
DN 128:101196
TI "Foie gras" development in birds: physiological and biochemical characteristics
AU Blum, Jean-Claude
CS INRA, Station de recherches avicoles, Centre de Tours-Nouzilly, Monnaie, 37380, Fr.
SO Comptes Rendus de l'Academie d'Agriculture de France (1997), 83(3), 101-115 CODEN: CRAFEQ; ISSN: 0989-6988
PB Academie d'Agriculture de France
DT Journal; General Review
LA French
AB Cramming of geese is an ancient skill (2,500 yr B.C.) that has allowed "foie gras" prodn. The hepatic steatosis which develops as a result of over-feeding is particularly dramatic: in less than 2 wk the liver wt. may increase 10-fold. The liver has a compn. which does not depend on the length of the force-feeding period, but only on its wt. The heavier the liver, the higher its lipid content, essentially triglycerides at a max. level of 55 to 60%. Though proportionally reduced the other components (water, proteins, ashes, phospholipids) are found increased taking the liver wt. into account: their total amts. are multiplied by 3 to 4. These observations may be applied to every kind of "foie gras", both from ducks (the muscovy duck and the mule duck: an ***hybrid*** cross muscovy x common duck) and from geese, although the lipid content of "foie gras" of ducks is slightly higher. Three factors would be implicated in the formation of "foie gras":important synthesis in situ in the liver; a partial failure in the system that allows the ***release*** of lipids into the blood; a particular ability of hepatic cells to stock triglycerides without affecting their structure and their functional activity. As a result of endogenous synthesis fatty acids are more satd. in "foie gras" than in adipose tissue, the linoleic acid level is particularly reduced (1% vs. 8 to 12% in adipose tissues) in spite of the intake: about 5% of the ingested energy. The failure in the lipid transport would be under a genetic control; it is obsd. in the Landes geese but not in the Rhine geese. It is only a partial failure which does not prevent fattening of the overfed birds ("role gras" development only explains 25% of the wt. gain). Actually lipids ***release*** into blood limits the fatty liver development:one day of fasting after the last force fed meal is enough to reduce the "foie gras" wt. of 23%. Fat ***release*** during cooking depends on temp. and length of the heating process. It increases with the liver wt. and is related to its compn. (high neg. correlation with phospholipids content). Large differences between the 3 kinds of "foie gras" were found in an expt. "Foie gras" from geese lost lest fat during cooking and there was only a small influence of the liver wt.; those of mule ducks lost more, the loss increasing quickly with the liver wt.; those of muscovy ducks lost a max. value (56%) independently of the liver wt. The slaughtering conditions (fasting after the last meal; refrigeration of the liver) may influence the fat loss. Finally the fat ***release*** during cooking could be essentially related to the hepatic structure and the cell membrane integrity. Blood anal. show that functional activities of the liver are maintained during the cramming period. Modifications are noticed only at the end, when the liver is considerably enlarged: increased enzymic activities (transaminases); bilirubin; late elimination of drugs specifically ***captured*** by the liver. The "foie gras" formation is a reversible process: after a long fasting period birds recovered their initial live wt. and a liver with the same characteristics (wt., compn., histol. structure) than those obsd. in never force-fed controls. It seems that cramming does not really hurt the birds. There is no symptom of acute or chronic stress: blood corticosterone unchanged all along the force-feeding period; no modification of the sensitiveness of ACTH; const. blood heterophils/lymphocytes ratio. All this and more was discussed with 20 refs.
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 48 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:16618 CAPLUS <<LOGINID::20071120>>
DN 128:137214
TI Detection of Paragonimus heterotremus in experimentally infected cat feces by antigen ***capture*** -ELISA and by DNA ***hybridization***
AU Maleewong, Wanchai; Intapan, Pewpan; Wongkham, Chaisiri; Wongratanacheewin, Surasak; Tapchaisri, Pramuan; Morakote, Nimit; Chaicumpa, Wanpen
CS Departments Parasitology, Biochemistry, Microbiology, Faculty Medicine, Khon Kaen University, Khon Kaen, 40002, Thailand

SO Journal of Parasitology (1997), 83(6), 1075-1078 CODEN: JOPAA2; ISSN: 0022-3395
PB American Society of Parasitologists
DT Journal
LA English
AB An antigen ***capture*** ELISA (antigen ***capture*** -ELISA) and DNA ***hybridization*** technique were developed and evaluated for their application in the detection of Paragonimus heterotremus infection in exptl. infected cats. An IgG fraction prepd. from serum of a rabbit immunized with P. heterotremus excretory-secretory (ES) products was used as the ***capture*** antibody. An IgG1 monoclonal antibody specific to the 22- and 31.5-kDa ES products of P. heterotremus was used as the antigen probe. As little as 0.24 ng of the ES products could be detected by this technique. A specific P. heterotremus DNA probe derived from the P. heterotremus genomic DNA library contg. 1,500 base pairs was used in a dot-blot ***hybridization*** assay for the detection of parasite DNA. The radioactively labeled probe could detect DNA ***released*** from as few as 2 P. heterotremus eggs. Both ELISA and DNA ***hybridization*** were found to have 100% specificity, with sensitivities of 73.7% and 100%, resp.
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 49 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:735761 CAPLUS <<LOGINID::20071120>>
DN 126:27377
TI Detection of hepatitis C virus RNA using ligation-dependent polymerase chain reaction in formalin-fixed, paraffin-embedded liver tissues
AU Park, Young Nyun; Abe, Kenji; Li, Hongbo; Hsuih, Terence; Thung, Swan N.; Zhang, David Y.
CS Mount Sinai Medical Center, City University New York, New York, NY, 10029, USA
SO American Journal of Pathology (1996), 149(5), 1485-1491 CODEN: AJPAA4; ISSN: 0002-9440
PB American Society for Investigative Pathology
DT Journal
LA English
AB Reverse transcription polymerase chain reaction (RT-PCR) has been used to detect hepatitis C virus (HCV) sequences in liver tissue. However, RT-PCR has a variable detection sensitivity, esp. on routinely processed formalin-fixed, paraffin-embedded (FFPE) specimens. RNA-RNA and RNA-protein cross-links formed during formalin fixation is the major limiting factor preventing reverse transcriptase from extending the primers. To overcome this problem, we applied the ligation-dependent PCR (LD-PCR) for the detection of HCV RNA in FFPE liver tissue. This method uses two ***capture*** probes for RNA isolation and two hemiprobes for the subsequent PCR. Despite cross-links, the ***capture*** probes and the hemiprobes are able to form ***hybrids*** with HCV RNAs ***released*** from the FFPE tissue. The ***hybrids*** are isolated through binding of the ***capture*** probes to paramagnetic beads. The hemiprobes are then ligated by a T4 DNA ligase to form a full probe that serves as a template for the Taq DNA polymerase. A total of 22 FFPE liver specimens, 21 with hepatocellular carcinoma (HCC) and 1 with biliary cirrhosis secondary to bile duct atresia were selected for this study, of which 13 patients were HCV seropos. and 9 seroneg. HCV RNA was detectable by LD-PCR from all 13 HCV-seropos. HCCs and from 5 of 8 HCV-seroneg. HCCs but not from the HCV-seroneg. liver with biliary atresia. By contrast, RT-PCR detected HCV sequences in only 5 of the HCV-seropos. and in 1 of the HCV-seroneg. HCCs. To resolve the discordance between the LD-PCR and RT-PCR results, RT-PCR was performed on frozen liver tissue of the discrepant specimens, which confirmed the LD-PCR pos. results. In conclusion, LD-PCR is a more sensitive method than RT-PCR for the detection of HCV sequences in routinely processed liver tissues. A high rate of HCV infection (86%) is found in HCC specimens, indicating a previously underestimated role of HCV in HCC pathogenesis.

L10 ANSWER 50 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:730535 CAPLUS <<LOGINID::20071120>>
DN 126:1919
TI Subtractive ***hybridization*** for the isolation of differentially expressed genes using magnetic beads
AU Aasheim, Hans-Christian; Logtenberg, Ton; Larsen, Frank
CS Department Immunology, Norwegian Radium Hospital, Oslo, Norway
SO Methods in Molecular Biology (Totowa, New Jersey) (1997), 69(cDNA Library Protocols), 115-128 CODEN: MMBIED; ISSN: 1064-3745
PB Humana
DT Journal
LA English
AB The subtractive ***hybridization*** strategy based on solid phase-phase ***hybridization*** on magnetic Dynabeads described by H. C. Aasheim (1994) was improved to take advantage of the properties of magnetic Dynabeads allowing simple and rapid buffer changes required for optimal ***hybridization*** and enzymic reactions. Purified mRNA from the subtractor cell or tissue population is isolated using magnetic Dynabeads oligo(dT)25, and directly converted to immobilized first-strand cDNA (subtractor beads). The mRNA from the target cell/tissue population is also isolated using Dynabeads oligo(dT)25 beads, ***eluted*** from the beads, dissolved in ***hybridization*** buffer, and mixed with subtractor beads. The target mRNA population is ***hybridized*** to the cDNA subtractor beads at 68.degree. for 20-24 h. Two addnl. ***hybridization*** rounds, using the same subtractor beads, are recommended to ensure optimal subtraction and enrichment of cell-specific sequences. After each ***hybridization*** step, the beads are regenerated by ***elution*** of the mRNA from the first-strand cDNA. After the final ***hybridization*** step, the specific mRNA left in the soln. is ***captured*** with oligo(dT)25 beads and converted to a radioactive cDNA probe for the screening of cDNA libraries. Alternatively, this material can e used for the generation of a subtractive cDNA library or can be used as a source for the amplification of members of known gene families using degenerated primers directed against the conserved areas. The later approach facilitates a directed search for differentially expressed genes. This system provides a fast and reliable way of generating subtractive probes for the isolation of cell/tissue-specific genes. An addnl. advantage of this method is that the subtractor beads can readily be regenerated and used for at least 3 different subtractions, each involving 3 ***hybridization*** steps.

L10 ANSWER 51 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:614080 CAPLUS <<LOGINID::20071120>>
DN 125:294129

TI Visualization of viral candidate cDNAs in infectious brain fractions from Creutzfeldt-Jakob disease by representational difference analysis
AU Dron, Michel; Manuelidis, Laura
CS Yale Medical School, New Haven, CT, 06510, USA
SO Journal of NeuroVirology (1996), 2(4), 240-248 CODEN: JNVIFK; ISSN: 1355-0284
PB Stockton
DT Journal
LA English
AB Creutzfeldt-Jakob Disease (CJD), a neurodegenerative and dementing disease of later life, is caused by a viruslike entity that is incompletely characterized. As in scrapie, all more purified infectious brain prepns. contain nucleic acids. However, it has not been possible to visualize unique bands that may derive from a viral genome. Here we used a subtractive strategy known as representational difference anal. (RDA) to uncover such sequences. To reduce the complexity of starting target nucleic acids, sucrose gradients were first used to select nuclease-resistant particles with a defined 120 S size. In CJD this single 120 S gradient peak is highly enriched for infectivity, and contains reduced amts. of PrP (Manuelidis, L. et al., 1995). Parallel 120 S fractions from uninfected brain were made to generate subtractor sequences. 120 S particles were lysed in GdnSCN, and nanogram amts. of ***released*** RNA were purified for random-primed cDNA synthesis. To ***capture*** representative fragments of 100-500 bp, cDNAs were cleaved with Mbo I for adaptor ligation and amplification. In the first expt. with moderate RDA selection, it was possible to visualize clones from CJD cDNA that did not ***hybridize*** to control cDNA. In the second expt., more exhaustive subtractions yielded a discrete set of CJD-derived gel bands. Competitive ***hybridization*** showed a subset of these bands was not present in either the control 120 S cDNA or in the hamster genome. This represents the first demonstration of apparently CJD-specific nucleic acid bands in more purified infectious prepns. Although exhaustive cloning, sequencing, and correlative titrn. studies need to be done, it is encouraging that most of the viral candidates selected thus far have no significant homol. with any previously described sequence in the database.

L10 ANSWER 52 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:556223 CAPLUS <<LOGINID::20071120>>
DN 125:199725
TI PDF modeling of autoignition in nonpremixed turbulent flows
AU Lakshmisha, K. N.; Rogg, B.; Bray, K. N. C.
CS Dep. Eng., Univ. Cambridge, Cambridge, CB2 1PZ, UK
SO Combustion Science and Technology (1995), 105(4-6), 229-243 CODEN: CBSTB9; ISSN: 0010-2202
PB Gordon & Breach
DT Journal
LA English
AB This paper presents the formulation and results of numerical simulation of autoignition in gaseous, nonpremixed, turbulent flows. Two specific problems are considered: (a) a homogeneous, isotropic turbulence with chem. reactions and mixing, and (b) an axisym., fuel jet ***released*** into an oxidizer environment. For the first problem the fluid mechanics and combustion are decoupled, while the second problem fully incorporates such a coupling. A ***hybrid*** computational approach is adopted wherein the governing mean flow and the .kappa.-.epsilon. equations are solved through a finite-vol., predictor-corrector, pressure implicit code TURBO-2D and the joint scalar pdf-transport equation (pdf = probability d. function) is simulated via a Monte Carlo technique. The flow code and the pdf code together run in tandem with each other. The fluid dynamics code supplies the mean flow and turbulence quantities to the pdf code. The pdf code, in turn, provides the mean mass d. via the mean thermochem. scalars to the fluid dynamics code. For the homogeneous, isotropic turbulence, computations made over a wide range of Damkoehler no. reveal at least four different regimes of turbulent autoignition. The results are represented in terms of a regime diagram. For the axisym. jet, the computations ***capture*** the basic features of autoignition and predict ignition-delay times and flame dimensions. Qual. comparison of predicted results with exptl. data are encouraging. However, a quant. comparison of mean and fluctuating quantities is an essential future step. The work is useful in understanding chem.-turbulence interaction during the process of autoignition in nonpremixed combustion.

L10 ANSWER 53 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:551818 CAPLUS <<LOGINID::20071120>>
DN 125:245011
TI Rapid purification and monitoring of immunoglobulin from ascites by perfusion ion-exchange chromatography
AU McCarthy, Eileen; Vella, George; Mhatre, Rohin; Lim, Yow-Pin
CS PerSeptive Biosystems, Inc., 500 Old Connecticut Path, Framingham, MA, 01701, USA
SO Journal of Chromatography, A (1996), 743(1), 163-170 CODEN: JCRAEY; ISSN: 0021-9673
PB Elsevier
DT Journal
LA English
AB A purifn. and online monitoring procedure for IgM was developed. Perfusion ion-exchange chromatog. was used for rapid purifn. of IgM from ascites fluid and ***hybridoma*** supernatant. Crude ascites was directly loaded onto an ion exchanger. Due to the complexity of IgM, a 2-step ion-exchange procedure had to be developed. This procedure involved a rapid cation-exchange chromatog. ***capture*** step followed by further purifn. using anion-exchange chromatog. High linear velocities, in excess of 3500 cm/h, enabled sepns. to be performed under 5 min. Purity of the final product by SDS-PAGE was shown to be >95%. Furthermore, the antibodies retained biol. activity as measured by indirect immunofluorescence (IIF) and ELISA. The IgM peak was also monitored online using a novel peak tracking approach. This involved placing an antibody column (specific to the IgM) prior to the ion-exchange column and operating the ion-exchange column with and without the antibody column in-line. The missing peak that is identified by comparing the two chromatograms indicates where the IgM ***elutes*** .

L10 ANSWER 54 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:335324 CAPLUS <<LOGINID::20071120>>
DN 125:27076
TI Immunoaffinity concentration and purification of waterborne enteric viruses for detection by reverse transcriptase PCR
AU Schwab, Kellogg J.; De Leon, Ricardo; Sobsey, Mark D.
CS Dep. Environ. Sci. Eng., Univ. North Carolina, Chapel Hill, NC, 27599-7400, USA
SO Applied and Environmental Microbiology (1996), 62(6), 2086-2094 CODEN: AEMIDF; ISSN: 0099-2240
PB American Society for Microbiology
DT Journal
LA English

AB To assess the risks from viral contamination of drinking-water supplies, there is a clear need for methods to directly detect viral pathogens. In this study, we developed a broad-spectrum immunocapture method for concn. and purifn. of enteric viruses. The method involved indirect antibody ***capture*** (AbCap) of intact viruses followed by ***release*** of virion genomic RNA and reverse transcriptase PCR for amplification and oligoprobe ***hybridization*** for detection. The procedure involved concg. enteric viruses from large vols. of water by std. filtration- ***elution*** techniques with 1MDS filters and 1 L of 1% beef ext.-0.05 M glycine (BE/G) as an eluate. The BE/G eluate was concd. and purified by polyethylene glycol (PEG) pptn., ProCipitate (a com. available protein pptg. reagent) pptn., and a second PEG pptn. to a vol. of approx. 500 .mu.l. Aliquots of the second PEG ppt. were further processed by RNA extn., AbCap, or cell culture anal. for infectious viruses. The AbCap method was applied to 11 field samples of fecally contaminated surface water. Of the 11 samples, 9 were pos. for enteric viruses by the AbCap method; 4 of 11 samples were pos. for enteric viruses by direct RNA extn. of a small aliquot of the second PEG conc.; and 4 of 11 samples were pos. for enteric viruses by measurement of cell culture infectivity. The results for enteric viruses were compared with those for std. bacterial and coliphage indicators of fecal contamination.

L10 ANSWER 55 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:83287 CAPLUS <<LOGINID::20071120>>
DN 124:136947
TI Rapid restriction mapping of cosmids by sequence-specific triple-helix-mediated affinity ***capture***
AU Ji, Huamin; Francisco, Todd; Smith, Lloyd M.; Guilfoyle, Richard A.
CS Dep. Chemistry, Univ. Wisconsin, Madison, WI, 53706, USA
SO Genomics (1996), 31(2), 185-92 CODEN: GNMCEP; ISSN: 0888-7543
PB Academic
DT Journal
LA English
AB A simple and rapid strategy for restriction mapping based on sequence-specific triple-helix affinity ***capture*** (TAC) was developed. The strategy was applied to the anal. of cosmid clones by the construction of a new cosmid vector, ScosTriplex-II, contg. two different triple-helix-forming sequences flanking the cloning site of the original SuperCOS-1 cosmid vector. For restriction mapping, the recombinant cosmid DNA is digested with NotI restriction enzyme or with one of four intron-encoded endonucleases for excision of intact inserts followed by controlled partial digestion with a mapping enzyme used in conjunction with the corresponding methyltransferase. The partial digestion products are combined with biotinylated triple-helix-forming oligonucleotides to form a triple-helical complex. The triple-helix complexes are immobilized on streptavidin-coated magnetic beads, washed, and ***eluted*** with pH 9 buffer soln. The fragments are sepd. and directly sized by agarose gel electrophoresis. Bidirectional maps are obtained simultaneously by binding to the two different triple-helix-forming oligonucleotides. No probe labeling, gel drying, blotting to membranes, ***hybridization*** , or autoradiog. is necessary. Also, TAC conditions that permit gel-free isolation of the terminal restriction fragments from cosmid inserts were found. These advantages afforded by ScosTriplex-II should facilitate the automation of cosmid restriction site fingerprinting needed for large-scale mapping and sequencing projects.

L10 ANSWER 56 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:71424 CAPLUS <<LOGINID::20071120>>
DN 124:108981
TI Replicable RNAs as analytical reagents and control of replication using probe sequences and ribozymes capable of removing the probe sequences
IN Stefano, James E.
PA Amoco Corporation, USA
SO U.S., 43 pp. Cont.-in-part of U.S. Ser. No. 252,243, abandoned. CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- --------
PI US 5472840 A 19951205 US 1990-630288 19901217 JP 02257898 A 19901018 JP 1989-256924 19890930 JP 3276955 B2 20020422 US 5763171 A 19980609 US 1995-468049 19950606
PRAI US 1988-252243 B2 19880930 US 1989-370218 B2 19890622 US 1990-630288 A1 19901217
AB Methods of inhibiting the replication of replicatable RNAs such as MDV-1 by incorporation of sequences that inhibit replication and ribozymes that can remove such structures to allow amplification by Q.beta. replicase are described for anal. use. These RNAs can be used as ***hybridization*** probes with the amplification of the MDV-1 sequence after ribozyme cleavage indicating the presence of the target sequence. The cleavage site for the ribozyme is only formed upon successful ***hybridization*** , for example, using a multicomponent ***hybridization*** probe including an MDV-1-contg. probe and a ribozyme-contg. probe that ***hybridize*** to one another and to adjacent sites on the target sequence. Alternatively, a ***hybrid*** between the RNA and a DNA target can be digested to ***release*** a replicable MDV-1. A no. of ***hybridization*** protocols, including those using ***capture*** probes and affinity labels, can be used with such probe and detection system.

L10 ANSWER 57 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:980756 CAPLUS <<LOGINID::20071120>>
DN 124:77612
TI Selection of ***hybrids*** by affinity ***capture*** (SHAC): A method for the generation of cDNAs enriched in sequences from a specific chromosome region
AU Chen-Liu, L. W.; Huang, B. C.; Scalzi, J. M.; Hall, B. K.; Sims, K. R.; Davis, L. M.; Siebert, P. D.; Hozier, J. C.
CS Applied Genetics Laboratories, Inc., Melbourne, FL, 32901, USA
SO Genomics (1995), 30(2), 388-92 CODEN: GNMCEP; ISSN: 0888-7543
PB Academic
DT Journal
LA English
AB We have established a method for prepg. cDNA sublibraries enriched in sequences from specific chromosome regions, called selection of ***hybrids*** by affinity ***capture*** (SHAC). This procedure can be described in two stages. In the first stage, a particular chromosome region, in this study mouse chromosome 11, was microdissected, followed by PCR amplification with a universal degenerate primer. This material is referred to as the "target" DNA. In the second stage, a mouse liver cDNA library with unique linker-adapter ends, referred to as the "source" cDNA, was ***hybridized*** to the biotin-labeled

target DNA prepd. during the first stage. The resulting DNA duplexes were ***captured*** by streptavidin-coated magnetic beads. The cDNAs were ***released*** from their biotin-labeled target homologs by alk. denaturation and recovered by PCR amplification. These cDNAs were referred to as the SHACcDNAs. Specificity of the SHACcDNA to chromosome 11 was verified by FISh anal. To examine representation of the SHACcDNA, we confirmed the presence of seven genes or singly-copy DNA segments known to be localized on mouse chromosome 11, using a dot blot assay. In addn., a second round of SHAC was performed to achieve even higher specificity for the resulting chromosome 11 SHACcDNA. The SHAC technol. should facilitate construction of cytogenetically defined cDNA libraries and should assist in the fields of gene discovery and genome mapping.

L10 ANSWER 58 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:915343 CAPLUS <<LOGINID::20071120>>
DN 124:1759
TI Development of a PCR protocol for sensitive detection of Cryptosporidium oocysts in water samples
AU Johnson, D. W.; Pieniazek, N. J.; Griffin, D. W.; Misener, L.; Rose, J. B.
CS Dep. Marine Sci., Univ. South Florida, St. Petersburg, FL, 33701-5016, USA
SO Applied and Environmental Microbiology (1995), 61(11), 3849-55 CODEN: AEMIDF; ISSN: 0099-2240
PB American Society for Microbiology
DT Journal
LA English
AB The development of a reliable method of using PCR for detection of Cryptosporidium oocysts in environmental samples with oligonucleotide primers which amplify a portion of the sequence encoding the small (18S) subunit of rRNA producing a 435-bp product was demonstrated. The PCR assay was found to provide highly genus-specific detection of Cryptosporidium spp. after ***release*** of nucleic acids from oocysts by a simple freeze-thaw procedure. The assay routinely detected 1 to 10 oocysts in purified oocyst prepns., as shown by direct microscopic counts and by an immunofluorescence assay. The sensitivity of the PCR assay in some seeded environmental water samples was up to 1,000-fold lower. However, this interference was eliminated by either flow cytometry or magnetic-antibody ***capture*** . Sensitivity was also improved 10- to 1,000-fold by probing of the PCR product on dot blots with an oligonucleotide probe detected by chemiluminescence. Confirmation of the presence of Cryptosporidium oocysts in water samples from the outbreak in Milwaukee, Wis., was obtained with this technique, and PCR was found to be as sensitive as immunofluorescence for detection of oocysts in wastewater concs.

L10 ANSWER 59 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:887190 CAPLUS <<LOGINID::20071120>>
DN 123:307499
TI Isolation of murine telomere-proximal sequences by affinity ***capture*** and PCR
AU Rounds, Donna; Brueckner, Martina; Ward, David C.
CS School Medicine, Yale University, New Haven, CT, 06510, USA
SO Genomics (1995), 29(3), 616-22 CODEN: GNMCEP; ISSN: 0888-7543
PB Academic
DT Journal
LA English
AB We describe a method of selectively enriching for murine telomere-proximal sequences using affinity ***capture*** followed by PCR amplification. The telomeric fragments were selected from NotI-digested and lambda exonuclease-resected mouse genomic DNA by annealing to a biotinylated riboprobe contg. multiple copies of the telomere repeat (TTAGGG)n. The resultant DNA-RNA ***hybrids*** were selectively retained on a matrix with covalently bound avidin. The ***captured*** DNA was then specifically ***released*** by RNase action, and PCR amplification was performed using mouse repeat primers. The PCR products were cloned and used to screen a mouse genomic cosmid library, and the resultant cosmid clones were analyzed by fluorescence in situ ***hybridization*** . Ten of 70 clones analyzed gave telomere-proximal ***hybridization*** signals, indicating an at least 500-fold enrichment for telomere-proximal sequences.

L10 ANSWER 60 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:800367 CAPLUS <<LOGINID::20071120>>
DN 123:195497
TI Target DNA ***capture*** by HIV-1 integration complexes
AU Miller, Michael D.; Bor, Yeou-Cherng; Bushman, Frederic
CS Infectious Disease Laboratory, Salk Institute for Biological Studies, La Jolla, CA, 92024, USA
SO Current Biology (1995), 5(9), 1047-56 CODEN: CUBLE2; ISSN: 0960-9822
PB Current Biology
DT Journal
LA English
AB The early steps of human immunodeficiency virus 1 (HIV-1) replication involve reverse transcription of the viral RNA and integration of the resulting cDNA into a host chromosome. The DNA integration step requires the integration machinery (preintegration complex) to bind to the host DNA before connecting the viral and host DNAs. Here, the authors present expts. that distinguish among 3 possible pathways of target-DNA ***capture*** : repeated binding and ***release*** of target DNA prior to the chem. strand-transfer step; binding followed by facilitated diffusion along target DNA (sliding); and integration at the initial target- ***capture*** site. The mechanism of target-DNA ***capture*** has implications for the design of gene therapy methods, and influences the interpretation of results on the selection of integration target sites in vivo. The authors present new in vitro conditions that allow them to assemble HIV-1 integrase, the virus-encoded recombination enzyme, with a viral DNA and then to trap assembled complexes bound to target DNA. The authors find that complexes of integrase and viral DNA do not slide along target DNA substantially after binding. They confirm and extend these results by analyzing target ***capture*** by a ***hybrid*** protein composed of HIV-1 integrase linked to a sequence-specific DNA-binding domain. The authors find that the integrase domain binds quickly and tightly under the above conditions, thereby obstructing function of the fused sequence-specific DNA-binding domain. The authors also monitor target-DNA ***capture*** by HIV-1 preintegration complexes purified from freshly infected cells. Partially purified complexes commit quickly and stably to the first target DNA added, whereas preintegration complexes in crude cytoplasmic exts. do not. The addn. of exts. from uninfected cells to partially purified complexes blocks quick commitment. Under new conditions favorable for the anal. of target-DNA ***capture*** in vitro, HIV-1 integrase complexes bind quickly and stably to target DNA without subsequent sliding. Parallel studies of preintegration

complexes support a model in which target-site ***capture*** in vivo is reversible as a result of the action of cellular factors.

L10 ANSWER 61 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:735700 CAPLUS <<LOGINID::20071120>>
DN 124:9343
TI Oligonucleotides having selectably cleavable and/or abasic sites
IN Urdea, Michael S.; Horn, Thomas
PA Chiron Corp., USA
SO U.S., 14 pp. Cont.-in-part of U.S. 5,258,506. CODEN: USXXAM
DT Patent
LA English
FAN.CNT 6 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI US 5430136 A 19950704 US 1990-559961 19900727 US 4775619 A 19881004 US 1984-661508 19841016 US 5118605 A 19920602 US 1988-251152 19880929 US 5258506 A 19931102 US 1989-398711 19890825 US 5367066 A 19941122 US 1991-736445 19910724 CA 2088257 A1 19920128 CA 1991-2088257 19910725 WO 9202528 A1 19920220 WO 1991-US5287 19910725 EP 543889 A1 19930602 EP 1991-914892 19910725 EP 543889 B1 19990421 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE PL 170146 B1 19961031 PL 1991-298545 19910725 EP 900805 A2 19990310 EP 1998-202721 19910725 EP 900805 A3 20020102 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE AT 179175 T 19990515 AT 1991-914892 19910725 US 5545730 A 19960813 US 1995-436125 19950508 US 5578717 A 19961126 US 1995-436663 19950508 US 5552538 A 19960903 US 1995-437581 19950509 JP 08311091 A 19961126 JP 1996-68167 19960325 JP 09031090 A 19970204 JP 1996-68176 19960325 JP 2951590 B2 19990920 JP 10279592 A 19981020 JP 1998-85820 19980331 JP 3170241 B2 20010528
PRAI US 1984-661508 A2 19841016 US 1988-251152 A2 19880929 US 1989-398711 A2 19890825 EP 1988-309203 A 19881003 CA 1988-597309 A 19881004 JP 1988-250726 A 19881004 US 1990-559961 A2 19900727 US 1991-736445 A 19910724 EP 1991-914892 A3 19910725 JP 1991-514119 A3 19910725 JP 1996-68176 A3 19910725 WO 1991-US5287 W 19910725
OS MARPAT 124:9343
AB Polynucleotides contg. abasic, cleavable sites are provided. These polynucleotides are useful in a variety of biochem. and chem. contexts, particularly in solid phase nucleic acid ***hybridization*** assays because a ***captured*** probe can be ***released*** from the support. The polynucleotides have the structure I where R is selected from the group wherein DNA1 is a first segment of DNA; DNA2 is a second segment of DNA; and R is selected from the group consisting of 2-nitrobenzyl, 4-penten-1-yl, (CH2)2SPh, (CH2)2SiMe3, II, P(O)(OH)2, and (CH2)2C6H4NO2-4 in which R' is hydrogen, aryl or aralkyl; the X substituents, Xi, are independently selected from the group consisting of amino, nitro, halogeno, hydroxyl, lower alkyl and lower alkoxy; the Y substituents, Yj, are independently selected from the group consisting of amino, nitro, halogeno, hydroxyl, lower alkyl and lower alkoxy; i is zero, 1, 2 or 3; and j is zero, 1, 2, 3 or 4. Also disclosed are photocleavable polynucleotides HO-5'[DNA1]3'-OP(O)(OH)O(CH2)xCH(2-O2NC6H4)(CH2)yOP(O)(OH)O-5'[DNA2]3'-OH (III; one of x and y is zero, the other is an integer in the range 1-12 inclusive). Thus, e.g., 2-(o-nitrophenyl)-1,2-ethanediol was treated with 4,4'-dimethoxytrityl chloride (DMT-Cl) to afford 1-O-DMT-2-(o-nitrophenyl)-1,2-ethanediol in 100% yield; the latter was converted to its .beta.-cyanoethyl 2-O-phosphoramidite DMT-O-CH2CH(2-O2NC6H4)OP(NPr-iso)2OCH2CH2CN(IV) in 100% yield by treatment with chloro-N,N-diisopropylamino-2-cyanoethoxy phosphine; IV thus prepd. was assembled into III with DNA1 = T15, x = 1, yr = 0, DNA2 = T20. Photolysis of the latter (Hg lamp, .lambda. > 350 nm) afforded fragments that migrated as would be expected for T15 and T20 segments.

L10 ANSWER 62 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:669689 CAPLUS <<LOGINID::20071120>>
DN 123:106875
TI Q-beta replicase-amplified assay for detection of Mycobacterium tuberculosis directly from clinical specimens
AU Shah, Jyotsna S.; Liu, Jing; Buxton, Debra; Hendricks, Annette; Robinson, Linda; Radcliffe, Gail; King, Walter; Lane, Dave; Olive, D. Michael; Klinger, Jeffrey D.
CS GENE-TRAK, Framingham, MA, 01701, USA
SO Journal of Clinical Microbiology (1995), 33(6), 1435-41
CODEN: JCMIDW; ISSN: 0095-1137
PB American Society for Microbiology
DT Journal
LA English
AB We report the results of a study conducted to evaluate the performance of manual Q-Beta replicase-amplified Mycobacterium tuberculosis complex assay compared with that of culture for detecting M. tuberculosis directly from digested sputum pellets. A total of 261 specimens submitted to three tuberculosis testing labs. were analyzed. Culture and acid-fast bacillus smear results were provided by the tuberculosis testing labs. Of these 261 specimens, 34 (13% prevalence rate) were pos. for M. tuberculosis by culture. The samples were digested and decontaminated by the testing labs. by using their std. digestion and decontamination procedures. An aliquot of the digested and decontaminated pellet was sent to GENE-TRAK. The digested and decontaminated pellet was neutralized by washing it with 0.067 M phosphate buffer (pH 6.8), and the bacteria present in the washed pellet were heat inactivated at 100.degree.C for 15 min. The samples were combined with sample processing buffer contg. GuSCN and were treated for 6 min in the GENE-TRAK Sample Processing Instrument to ***release*** the nucleic acids. The ***released*** rRNA was analyzed in a manual Q-Beta replicase assay format which incorporates elements of sandwich ***hybridization*** , reversible target ***capture*** , and Q-Beta replicase signal amplification technologies. In comparison with culture, the overall assay sensitivity and specificity were 97.1 and 96.5%, resp. The pos. predictive value was 80.5%, and the neg. predictive value was 99.5%. After anal. of discrepant results, the assay sensitivity and specificity were 97.3 and 97.8%, resp., and the prevalence rate was 14%. The pos. predictive value and the neg. predictive value were 87.8 and 99.5%, resp. The Q-Beta replicase assay is rapid, sensitive, semiquant., and specific for the direct detection of M. tuberculosis from clin. specimens.

L10 ANSWER 63 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:658862 CAPLUS <<LOGINID::20071120>>
DN 123:134190

TI Screening of cDNA fragments generated by differential RNA display
AU Martin-Laurent, Fabrice; Franken, Philipp; Gianinazzi, Silvio
CS Lab. Phytoparasitologie, INRA/CNRS, Dijon, 21034, Fr.
SO Analytical Biochemistry (1995), 228(1), 182-4 CODEN: ANBCA2; ISSN: 0003-2697
PB Academic
DT Journal
LA English
AB Subtractive and differential ***hybridization*** are methods that have been successfully used to analyze and isolate differentially expressed genes, but they are relatively time-consuming. Recently, differential display reverse transcription (DDRT) has proved to be a powerful technique for detecting changes in gene expression of eukaryotic cells. The crucial step of this technique is the subdivision of total cDNA into 12 fractions using an anchored oligo(dT) primer, with nearly equal nos. of represented mRNA species, followed by PCR with a random chosen short oligonucleotide. Amplified cDNA fragments are sepd. on a denaturing polyacrylamide gel and differences in banding patterns reflect differential transcription. Bands of interest can be ***eluted*** and reamplified for further anal. It is necessary for all three methods to confirm that the genes corresponding to screened clones or fragments are really differentially expressed. One approach is to use them as probes in Northern blot anal. and, recently, a second procedure has been developed which is the screening of displayed cDNAs by Northern blot affinity ***capture*** . Here we present an alternative rapid method for verification which has been used for the transcriptional anal. of nodule-related broadbean genes. It consists in ***hybridizing*** labeled total cDNA directly to cDNA fragments generated by differential RNA display.

L10 ANSWER 64 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:294444 CAPLUS <<LOGINID::20071120>>
DN 122:101139
TI Determination of genetic expression by specific ***capture*** of RNA and its direct quantitation by free-zone capillary electrophoresis
IN Reyes Engel, Armando; Dieguez Lucena, Jose Luis
PA Universidad de Malaga, Spain
SO Span., 5 pp. CODEN: SPXXAD
DT Patent
LA Spanish
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI ES 2055661 A1 19940816 ES 1993-103 19930120
ES 2055661 B1 19950301
PRAI ES 1993-103 19930120
AB The level of expression of a gene is detd. by (1) purifn. of total RNA, (2) soln.-phase ***hybridization*** of the specific mRNA to a biotinylated oligonucleotide, (3) ***capture*** of the ***hybrid*** on streptavidin-coated magnetic beads, (4) ***elution*** of the specific mRNA, (5) concn. of the mRNA, and (6) quantitation of the mRNA by capillary electrophoresis. This method was applied to detn. of angiotensin II receptor mRNA in blood.

L10 ANSWER 65 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:550533 CAPLUS <<LOGINID::20071120>>
DN 121:150533
TI A solid-phase amplification method for detection of nucleic acid sequences using restriction enzymes
IN Gruters, Rob; Cleuziat, Philippe; Bonnici, Francoise; Mallet, Francois
PA Bio Merieux, Fr.
SO Fr. Demande, 23 pp. CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI FR 2697851 A1 19940513 FR 1992-13562 19921110
FR 2697851 B1 19950106
PRAI FR 1992-13562 19921110
AB A method of detecting and amplifying a sequence in a sample using an immobilized partially double-stranded probe and restriction enzymes is described. The single-stranded domain ***hybridizes*** to the target sequence and includes a restriction site. The analyte nucleic acid is denatured and ***hybridized*** with the immobilized probe and then digested with the restriction enzyme. The sequence from the immobilized probe that is ***released*** by the digestion is then ***captured*** by a similar probe and the ***hybrid*** is then digested with the same enzyme to ***release*** the complementary strands. By repeating this process with denaturation of the ***hybrids*** between cycles of ***hybridization*** , the ***release*** of immobilized sequences is equiv. to an amplification. The method does require the use of radioactive labels and can be carried out a const. temp. near the optimum for the restriction enzyme.. The method is demonstrated with synthetic sequences.

L10 ANSWER 66 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:214649 CAPLUS <<LOGINID::20071120>>
DN 120:214649
TI Rapid and highly sensitive quantification of mouse IgG combining chromatographic and immunoanalytic procedures
AU Hartmann, Hartmann; Stelling, Olaf; Schell, Dietmar
CS ABION, Juelich, Germany
SO Proceedings of MoBBEL (1993), Volume Date 1992, 7, 107-10 CODEN: PRMOEI; ISSN: 0946-7238
DT Journal
LA English
AB The ABICAP method for quantification of IgG, which uses a microaffinity column contg. a gel onto which a ***capture*** antibody is immobilized, was modified for use with a concd. fermn. supernatant of the ***hybridoma*** clone 2900. It was possible to increase the specificity and sensitivity of the assay using a sandwich type assay with an FITC-labeled secondary antibody. The assay format was also adapted to the 96 microtiter plate size, allowing the direct measurement of the ***eluted*** samples in a microtiter plate fluorescence reader.

L10 ANSWER 67 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:3753 CAPLUS <<LOGINID::20071120>>
DN 120:3753
TI Detection of dengue-2 viral RNA by reversible target ***capture*** ***hybridization***
AU Chandler, Laura J.; Blair, Carol D.; Beaty, Barry J.
CS Coll. Vet. Med., Colorado State Univ., Fort Collins, CO, 80523, USA
SO Journal of Clinical Microbiology (1993), 31(10), 2641-7 CODEN: JCMIDW; ISSN: 0095-1137
DT Journal
LA English

AB A reversible target ***capture*** (RTC) sandwich ***hybridization*** technique has been developed for the detection of dengue-2 viral RNA. The RTC is a form of sandwich ***hybridization*** that utilizes two probes: a poly(dA)-tailed ***capture*** probe and a labeled detector probe. Following ***hybridization*** of both probes to the analyte in soln., the poly(dA)-tailed ***capture*** probe is used to selectively remove the ***hybrids*** by ***capture*** on oligo(dT)-coated paramagnetic beads. After ***elution*** from the beads, the presence of specific ***hybrids*** is revealed by detection of the labeled probe. After optimization of all parameters by using 32P-labeled probes, digoxigenin was used as a label to preclude the use of radioisotopes. The sensitivity of the developed RTC procedure was detd. The lowest amt. of virus detectable in cell culture lysates by using 32P-labeled probes was 20 PFU, while with digoxigenin-labeled probes, 200 PFU was detectable. The RTC procedure also detected dengue-2 virus in infected mosquitoes, both individually and in pools. The RTC has the advantage of being performed directly on crude samples, eliminating the need for phenol extn. and purifn. of target nucleic acids. These results indicate that the RTC procedure is sensitive, rapid, and easy to perform and that its use in surveillance programs will allow detection of dengue virus in pools of mosquitoes more rapidly than current procedures.

L10 ANSWER 68 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1993:442049 CAPLUS <<LOGINID::20071120>>
DN 119:42049
TI ***Capturing*** of displaced DNA strands as a diagnostic method
AU Collins, Mary
CS Genet. Inst., Cambridge, MA, 02140-2387, USA
SO Nonradioact. Labeling Detect. Biomol. (1992), 407-13. Editor(s): Kessler, Christoph. Publisher: Springer, Berlin, Germany. CODEN: 58UQAV
DT Conference
LA English
AB Displacement of a signal DNA strand from a partial duplex DNA probe is useful to detect specific DNA or RNA mols. of interest. A probe complex consists of a probe strand which is homologous to the mol. of interest and a labeled signal strand which separates from the probe complex when the probe strand binds its target. A third nucleic acid strand is used to ***capture*** the ***released*** signal strand, and the ***capturing*** strand is incapable of mediating strand displacement by itself.

L10 ANSWER 69 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1993:423852 CAPLUS <<LOGINID::20071120>>
DN 119:23852
TI DNA isolation using methidium-spermine-Sepharose
AU Harding, John D.; Bebee, Robert L.; Gebeyehu, Gulilat
CS Life Technol. Inc., Gaithersburg, MD, 20898, USA
SO Methods in Enzymology (1992), 216(Recombinant DNA, Pt. G), 29-39 CODEN: MENZAU; ISSN: 0076-6879
DT Journal
LA English
AB Protocols are described for isolating DNA from a variety of complex samples (urine, serum, whole blood, cultured cells, phage lysates) using a DNA ***capture*** reagent consisting of the intercalator, methidium, attached to Sepharose beads by a spermine linker. DNA is ***released*** from the reagent in 0.1-0.5N KOH or NaOH and is characterized by procedures such as dot-blot ***hybridization*** , sequencing, or PCR anal. The procedure is versatile and easy to use.

L10 ANSWER 70 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1993:421450 CAPLUS <<LOGINID::20071120>>
DN 119:21450
TI Chromosome fishing: An affinity ***capture*** method for selective enrichment of large genomic DNA fragments
AU Kandpal, Rajendra P.; Ward, David C.; Weissman, Sherman M.
CS Sch. Med., Yale Univ., New Haven, CT, 06510, USA
SO Methods in Enzymology (1992), 216(Recombinant DNA, Pt. G), 39-54 CODEN: MENZAU; ISSN: 0076-6879
DT Journal
LA English
AB An affinity ***capture*** protocol was developed for selective enrichment of large-size genomic fragments. The method requires a probe originating from the end of the target fragment and involves limited resection of the DNA by using a strand-specific exonuclease, ***hybridization*** of a biotinylated RNA probe to the resected end, selective retention of the ***hybrid*** mols. on an avidin matrix, and specific ***release*** of the ***captured*** DNA by treatment with RNase. The ***eluted*** fragment, which is highly enriched, can then be used for prepg. a fragment-specific sublibrary, and as a probe for screening phage, cosmid, or YAC libraries as well as for selecting cDNAs encoded by the fragment. Thus, the enriched fragment will permit isolation as well as mapping of the expressed sequences. Since the end probes are available from linking libraries, a PCR-assisted method for constructing linking and jumping libraries was also developed. Details of protocols are presented for affinity ***capture*** of large DNA fragments and PCR-based construction of jumping and linking libraries.

L10 ANSWER 71 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1993:216127 CAPLUS <<LOGINID::20071120>>
DN 118:216127
TI Partial and total reduction of carbon dioxide emissions of automobiles using carbon dioxide traps
AU Seifritz, W.
CS Inst. Energy Econ., Univ. Stuttgart, Stuttgart, D-7000/80, Germany
SO International Journal of Hydrogen Energy (1993), 18(3), 243-51 CODEN: IJHEDX; ISSN: 0360-3199
DT Journal
LA English
AB A ***hybrid*** H-hydrocarbon fuel-driven Otto engine motor car is proposed, which is equipped with a CO2 trap. The design includes energy storage systems which enhance the energy:mass ratio, compared to a H fuel- or battery-powered car. Light metal hydrides (MgH2) and/or light metal carbides (Li2C2, Mg2C3, or Al4C3) are used as energy storage media. The metals store H and, when empty, also ***capture*** CO2 and do not require large power sources for operation. In operation with MgH2, H is ***released*** and fed together with gasoline to the engine, the exhaust gas is condensed and CO2 and injected to the storage where it reacts forming MgCO3. The MgCO3 is treated to regenerate MgH2. The CO2 trapping system can be used to treat emissions from other sources.

L10 ANSWER 72 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1993:161893 CAPLUS <<LOGINID::20071120>>

DN 118:161893
TI Direct quantification of specific mRNA using a selected biotinylated oligonucleotide by free solution capillary electrophoresis
AU Reyes-Engel, A.; Dieguez-Lucena, J. L.
CS Fac. Med., Univ. Malaga, Malaga, 29080, Spain
SO Nucleic Acids Research (1993), 21(3), 759-60 CODEN: NARHAD; ISSN: 0305-1048
DT Journal
LA English
AB A procedure was developed for quantifying a specific mRNA, purifying it with a selected biotinylated oligonucleotide (sbODN), and measuring its absorbance by free soln. capillary electrophoresis (CE). This method was applied to study the expression of the angiotensin II receptor gene. Total RNA was isolated from 2 to 20 mL of whole blood and ***hybridized*** with a specific biotinylated oligonucleotide. The ***hybrid*** was ***captured*** on streptavidin magnetic beads, then the specific mRNA ***eluted*** from the ***hybrid*** and quantified by either CE or RT-PCR. Alternately, the same samples were purified by biotinylated oligo d(T) and quantified by RT-PCR. The concns. of specific mRNA obtained in both methods are given. Platelet mRNA was used as a neg. control, since no expression of this gene was detected by RT-PCR or CE. To analyze possible variations in expression, the authors studied whole blood from a patient with pheochromocytoma, who was expected to have a high level of expression of the angiotensin II receptor gene, and obtained a value four times higher than did those from normal subjects. Results obtained by the direct detection of the mRNA concn., quantified by spectrophotometric measuring in CE, correlated well with the values by quant. RT-PCR of the same samples. Using this procedure, a quantification of expression of low expressed genes is easy and fast, subject to two limiting factors. This procedure represents a practical alternative to other methods such as Northern blotting, RT-PCR or S1 Nuclease treatment and avoids isotopic handling.

L10 ANSWER 73 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:646606 CAPLUS <<LOGINID::20071120>>
DN 117:246606
TI Use of high-temperature washing and reversible target ***capture*** to improve the sensitivity of ***hybridization*** assays
IN Collins, Mark L.; Blomquist, Cecile; Lombardo, Massimo; Eldredge, John
PA Amoco Corp., USA
SO PCT Int. Appl., 44 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI WO 9215708 A1 19920917 WO 1992-US1433 19920221 W: JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE EP 529070 A1 19930303 EP 1992-910601 19920221 R: DE, FR, GB, IT US 5702896 A 19971230 US 1996-598142 19960207
PRAI US 1991-661917 A 19910227 WO 1992-US1433 W 19920221 US 1993-147906 B1 19931103
AB A method for improving the sensitivity of ***hybridization*** assays which reduces non-specific binding (NSB) and non-specific ***hybridization*** (NSH) is disclosed. The method includes a washing step utilizing tetra-alkylammonium salts at high temps., and ***release*** steps in which a probe-target complex is ***released*** from a solid support and recaptured. Use of both the washing and ***release*** steps results in substantial redn. in NSB and NSH without performing several rounds of ***release*** and recapture of the target nucleic acids. Using a single round of reversible target ***capture*** with high-temp. wash followed by ***release*** of the bound probe-target complex, picogram sensitivity was attained in detection of HIV RNA.

L10 ANSWER 74 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:646234 CAPLUS <<LOGINID::20071120>>
DN 117:246234
TI The selective isolation of novel cDNAs encoded by the regions surrounding the human interleukin 4 and 5 genes
AU Morgan, John G.; Dolganov, Gregory M.; Robbins, Sabrina E.; Hinton, Linda M.; Lovett, Michael
CS Dep. Mol. Genet., Genelabs Inc., Redwood City, CA, 94063, USA
SO Nucleic Acids Research (1992), 20(19), 5173-9 CODEN: NARHAD; ISSN: 0305-1048
DT Journal
LA English
AB Modifications to direct cDNA selection were developed that allow the rapid and reproducible isolation of low abundance cDNAs encoded by large genomic clones. Biotinylated, cloned genomic DNAs are ***hybridized*** in soln. with amplifiable cDNAs. The genomic clones and attached cDNAs are ***captured*** on streptavidin-coated magnetic beads, the cDNAs are ***eluted*** and amplified. This protocol was applied to a 425-kb YAC that contains the human IL4 and IL5 genes. After 2 cycles of enrichment 24 cDNAs were evaluated, all of which were homologous to the YAC. DNA sequencing revealed that 9 cDNAs were 100% homologous to the interferon regulatory factor 1 (IRF1) gene. Six clones were 70% homologous to the murine P600 gene, which is coexpressed with IL4 and IL5 in mouse Th2 cells. The 9 remaining clones were unique within the sequence databases and were non redundant. All of the selected cDNAs were initially present at very low abundance and were enriched by as much as 100,000-fold in 2 cycles of enrichment. This modified selection technique should be readily applicable to the isolation of many candidate disease loci as well as the derivation of detailed transcription maps across large genomic regions.

L10 ANSWER 75 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:466072 CAPLUS <<LOGINID::20071120>>
DN 117:66072
TI Method for immunoassay using particulate labels and apparatus therefor
IN Imai, Kazumichi; Nomura, Yasushi; Koga, Masataka; Tokinaga, Daizo; Takahashi, Satoshi; Oki, Hiroshi; Miyake, Ryo; Okano, Kazunori; Yasuda, Kenji
PA Hitachi, Ltd., Japan
SO Eur. Pat. Appl., 16 pp. CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI EP 488152 A2 19920603 EP 1991-120157 19911126 EP 488152 A3 19921125 R: DE, GB JP 04204379 A 19920724 JP 1990-339385 19901130 JP 04273065 A 19920929 JP 1991-34031 19910228

PRAI JP 1990-339385 A 19901130 JP 1991-34031 A 19910228
AB An analyte is detd. by (a) binding to receptors on a solid phase, (b) reacting the bound analyte with a ligand labeled with fluorescent particles, (c) removing excess labeled ligand and then adding a label-liberating agent; (d) introducing the soln. contg. the liberated fluorescent particles into a flow cell; (e) detecting fluorescence of the particles passing through the cell to count the particles; (f) computing the analyte concn. from the no. of particles detected. In immunoassays, the receptor and ligand are antibodies, the analyte is an antigen or hapten, the particles are fluorescent-labeled latex or inorg. particles, and the liberating agent is a chaotropic ion. Alternatively, the receptor is bound to the solid phase via a nucleic acid (or oligonucleotide) ***hybrid*** or double-stranded DNA, and the label is liberated with a restriction enzyme. An automated app. for performing the immunoassays is described with the aid of schematic diagrams.

L10 ANSWER 76 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:251550 CAPLUS <<LOGINID::20071120>>
DN 116:251550
TI Quantification of ethylene losses in different container-seal systems and comparison of biotic and abiotic contributions of ethylene accumulation in cultured tissues
AU Mensuali-Sodi, A.; Panizza, M.; Tognoni, F.
CS Scu. Super. Studi Univ. Perfezionamento, Pisa, I-56100, Italy
SO Physiologia Plantarum (1992), 84(3), 472-6 CODEN: PHPLAI; ISSN: 0031-9317
DT Journal
LA English
AB Ethylene losses and ***release*** were compared in four container-seal systems for in vitro cultures: Erlenmeyer flasks sealed with silicone, caoutchouc or styrene butadiene stoppers and glass bottles with screw caps supplied with caoutchouc septa. The last system proved to be the most suitable (i.e. min. ethylene loss and ***release***) to det. ethylene accumulation during axillary budding of lavandin (Lavandula officinalis .times. Lavandula latifolia cv. Grosso). Gelling agents (agar and Gelrite) also discharged ethylene and agar was identified as the main abiotic source. Math. elaboration of exptl. data was then performed to est. biol. ethylene prodn.

L10 ANSWER 77 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:209116 CAPLUS <<LOGINID::20071120>>
DN 116:209116
TI Replicatable and ***hybridizable*** recombinant RNA probes and ***hybridization*** assay
IN Kramer, Fred R.; Lizardi, Paul M.
PA Columbia University, USA
SO PCT Int. Appl., 113 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 6 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI WO 9118117 A1 19911128 WO 1991-US3634 19910523 W: AU, CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE AU 9179977 A 19911210 AU 1991-79977 19910523
PRAI US 1990-527585 A 19900523 WO 1991-US3634 A 19910523
AB Replicatable and ***hybridizable*** recombinant single-stranded micro- or nanovariant RNA contg. a recognition/initiation sequence for RNA-dependent RNA polymerase and a heterologous RNA sequence complementary to a nucleic acid sequence of interest is described. This RNA can be used to detect and/or quantitate target nucleic acid sequences. Plasmid pT7-MDV-poly contg., fused to a T7 promoter, cDNA for MDV-1 RNA contg. a polylinker with multiple cloning sites was prepd. DNA encoding RNA complementary to Plasmodium falciparum DNA or HIV RNA was inserted into this plasmid. Transcription of these plasmids produced RNA probes which were used to identify pathogen nucleic acids. The target nucleic acid-RNA probe complex was ***captured*** by an oligo(dT)-paramagnetic particle conjugate via a poly(dA)-contg. oligonucleotide having a sequence complementary to the target nucleic acid. After removal of nonhybridized probes, the bound probe was ***released*** and amplified with Q.beta. replicase.

L10 ANSWER 78 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:77787 CAPLUS <<LOGINID::20071120>>
DN 116:77787
TI Preparation and isolation of single-stranded biotinylated nucleic acids by avidin-biotin cleavage
IN Wu, Annie Liu
PA Eastman Kodak Co., USA
SO Eur. Pat. Appl., 13 pp. CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI EP 456304 A1 19911113 EP 1991-201015 19910427 EP 456304 B1 19951108 R: AT, BE, CH, DE, DK, FR, GB, IT, LI, LU, NL, SE US 5387505 A 19950207 US 1990-519533 19900504 CA 2039222 A1 19911105 CA 1991-2039222 19910327 AT 130048 T 19951115 AT 1991-201015 19910427 JP 04228076 A 19920818 JP 1991-100792 19910502 FI 9102141 A 19911105 FI 1991-2141 19910503
PRAI US 1990-519533 A 19900504
AB A biotinylated target nucleic acid is isolated from a mixt. of nucleic acids using a caoture reagent comprising avidin. The targetted nucleic acid is complexed with avidin on a substrate and sepd. from uncomplexed materials. The complex is heated at >65.degree. to cleave the avidin-biotin bond and ***release*** the bound nucleic acid. Upon ***release*** , the the targetted nucleic acid can be collected or detected in a suitable manner, e.g. with a complementary probe. The method is also useful for prepg. single-stranded DNA. A target human leukocyte antigen (HLA) DNA was amplified by polymerase chain reaction using a biotinylated primer. The amplified DNA was isolated using avidin-biotin complexation and denaturation. The single-stranded DNA was isolated by heating at 95.degree. for 30 min to break the avidin-biotin complex. The isolated DNA was mixed with ***capture*** probe and detected with peroxidase-avidin conjugate and leuco dye.

L10 ANSWER 79 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1991:139284 CAPLUS <<LOGINID::20071120>>
DN 114:139284
TI A Plasmodium falciparum-specific reverse target ***capture*** assay
AU Chen, Guo Xian; Zhu, Jingdong; Plitt, James R.; Weiler, Anita K.; Zolg, J. Werner
CS Dep. Mol. Biol., Biomed. Res. Inst., Rockville, MD, USA

SO Molecular and Biochemical Parasitology (1991), 44(2), 165-7
CODEN: MBIPDP; ISSN: 0166-6851
DT Journal
LA English
AB P. falciparum DNA is detected with an assay modeled according to the reverse target ***capture*** assay described by D. V. Morrissey et al. (1989) for the detection of Listeria cells. A poly(A)-tailed oligonucleotide (pWZ34), derived from the partial sequence of a 4-kb repetitive unit of P. faciparum, functions as a ***capture*** probe and the labeled 21-bp repetitive units specific for P. falciparum serve as a reporter probe. Both probes are complementary to non-overlapping regions of the target DNA and in the presence of high concns. of chaotropic salts, ***hybridization*** efficiently takes place at relatively low temps. (15 min, 37.degree.C). The addn. of poly(dT)-derivatized ferromagnetic beads allows the formation of A:T base pairing between the tailed beands the tailed ***capture*** probe. Upon applying magnetic force, the target- ***capture*** -reporter-probe complex attached to the beads is removed from the reaction mixt., leaving the bulk of unreacted reporter mols. behind. Subsequent washings of the immobilized complex reduces the amt. of non-specifically bound reporter probe. After ***elution*** of the complex from the beads a new cycle of ***capture*** , washing and ***release*** of the target-***capture*** -reporter-probe complex is initiated by the addns. of unused (dT)-tailed beads. After 3 cycles, the signal-to-noise ratio with 0.1 pg of P. falciparum DNA as a target was as high as 21-27, with a background of 8-10 cpm. The assay is unique in its speed, well suited for large sample nos., and allows the manipulation of the background at will by simply increasing the no. of ***capture*** rounds.

L10 ANSWER 80 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1991:78168 CAPLUS <<LOGINID::20071120>>
DN 114:78168
TI RNA template end-linked probe constructs and methods for use
IN Stefano, James E.
PA Gene-Trak Systems, USA
SO Eur. Pat. Appl., 26 pp. CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- --------
PI EP 361983 A2 19900404 EP 1989-310066 19891002 EP 361983 A3 19910403 EP 361983 B1 19960515 R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE JP 02257898 A 19901018 JP 1989-256924 19890930 JP 3276955 B2 20020422 EP 707076 A1 19960417 EP 1995-114651 19891002 EP 707076 B1 20020327 R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
PRAI US 1988-252243 A 19880930 US 1989-370218 A 19890622 EP 1989-310066 A3 19891002
AB Target nucleic acid is detected by contacting the sample under ***hybridizing*** conditions with a probe comprising (a) an RNA template replicatable by an RNA-directed RNA polymerase and (b) nucleic acid sequences at the 3' and 5' ends of the template that are complementary to 2 sequences of the target nucleic acid. ***Hybridization*** of target with the probe forms a ribozyme. Cleavage of the ribozyme is induced, which ***releases*** the RNA template from the target nucleic acid. The ***released*** RNA template is replicated for a predetd. period of time and the replicated RNA is detected as an indication of the presence or absence of target nucleic acid. Kits are also disclosed. Formalin-fixed elementary bodies of Chlamydia trachomatis were lysed with proteinase K and Sarkosyl, tailed ***capture*** oligonucleotide and probe, contg. a midivariant (MDV) cDNA construct ligated to 2 oligonucleotides (probe construction given), were added, and soln.-phase ***hybridization*** was allowed at 37.degree. for 30 min. Target-probe ***hybrids*** were ***captured*** by oligo(T)-derivatized magnetic beads, the beads were washed, and target-probe ***hybrids*** were ***released*** from the beads, recaptured with fresh sets of beads 2 times, and ***released*** . Buffer contg. MgCl2 (to induce ribozyme cleavage), ATP, GTP, CTP, and UTP were added to the bead eluate and the soln. was incubated with Q.beta. replicase for 12 min at 37.degree.. Replication was stopped with addn. of 5 .mu.L 20 mM EDTA and 32 .mu.g propidium iodide/mL. Relative fluorescence (emission max. 365 nm) was obsd. The sensitivity of the assay for C. trachomatis RNA was .apprx.103 elementary bodies.

L10 ANSWER 81 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1990:568506 CAPLUS <<LOGINID::20071120>>
DN 113:168506
TI Nucleic acid ***hybridization*** assay using sequences with selectively cleavable sites, and prepn. of an oligonucleotide containing a periodate-cleavable linker
IN Urdea, Michael S.
PA Chiron Corp., USA
SO Eur. Pat. Appl., 24 pp. CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 6 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- --------
PI EP 360940 A2 19900404 EP 1988-309203 19881003 EP 360940 A3 19910731 EP 360940 B1 19960131 R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE US 5118605 A 19920602 US 1988-251152 19880929 AT 133714 T 19960215 AT 1988-309203 19881003 EP 703296 A1 19960327 EP 1995-108635 19881003 EP 703296 B1 19980722 R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE ES 2083955 T3 19960501 ES 1988-309203 19881003 AT 168724 T 19980815 AT 1995-108635 19881003 JP 02092300 A 19900403 JP 1988-250726 19881004 US 5545730 A 19960813 US 1995-436125 19950508
PRAI US 1988-251152 A 19880929 US 1984-661508 A2 19841016 EP 1988-309203 A3 19881003 CA 1988-597309 A 19881004 JP 1988-250726 A 19881004 US 1989-398711 A2 19890825 US 1990-559961 A3 19900727
OS MARPAT 113:168506
AB Nucleic and ***hybridization*** methods and probes are provided in which the presence or absence of ***hybridization*** at a predetd. stringency allows for the ***release*** of a label from a support. The methods comprise e.g. (1) combining, under ***hybridizing*** conditions, the nucleic acid analyte and polynucleotide reagent, such that sample or reagent component is bound to a support, and ***hybridization*** results in a label being bound to the support through a selectable cleavage site; (2) substantially freeing the support of label bound to it other than through the selectable cleavage site; (3) cleaving the selectable cleavage site; and (4) detecting the label free of the support. The cleavage site may be a restriction endonuclease site (cf. U.S. Application Serial

No. 06/661,508) or a chem. cleavable site, e.g. a periodate-cleavable 1,2-diol. A protected tartaric acid reagent is provided and is used in the prepn. of a nucleic acid sequence contg. a periodate-cleavable linker. The methods of the invention allow distinction between nonspecific and specific binding; i.e., only specific binding is detected. Thus, O,O-dibenzoyltartaric-2-(O-dimethoxytrityl)hydroxyethyl-N-methyl-N-methyl-2-hydroxyethyldiamide (prepn. given) was coupled to 2 oligonucleotides using std. techniques. The prepd. periodate-cleavable oligonucleotide was used in a ***hybridization*** assay for 0-1 fmol of a synthetic oligonucleotide target sequence. An assay using an immobilized .gamma.-32P-labeled BamHI-cleavable probe is described.

L10 ANSWER 82 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1990:494353 CAPLUS <<LOGINID::20071120>>
DN 113:94353
TI Methods, reagents, kits, and instrumentation for affinity assays using target amplification
IN Collins, Mark Leo; Halbert, Donald Neil; King, Walter; Lawrie, Jonathan Michael
PA Amoco Corp., USA
SO Eur. Pat. Appl., 35 pp. CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI EP 328829 A2 19890823 EP 1988-312135 19881221 EP 328829 A3 19900919 EP 328829 B1 19950913 R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE AU 8827359 A 19890713 AU 1988-27359 19881220 JP 01211500 A 19890824 JP 1988-323183 19881221 JP 2817926 B2 19981030 US 5750338 A 19980512 US 1994-238080 19940503 US 5714380 A 19980203 US 1996-622491 19960325 US 37891 E1 20021022 US 2000-533906 20000308
PRAI US 1987-136920 A 19871221 US 1986-922155 B2 19861023 US 1991-644967 B2 19910122 US 1991-648468 B1 19910131 US 1992-946749 B1 19920917 US 1993-124826 B1 19930921 US 1994-238080 A5 19940503 US 1994-257469 B1 19940608 US 1995-400657 A3 19950308
AB Methods, reagents, compns., kits, and instrumentation for performing affinity assays, esp. assays for target polynucleotides, and for amplification of target mols. are disclosed which use a support capable of specifically assocg. with the target under binding conditions. The XbaI-HindIII fragment of the enterotoxigenic gene eltA1 of Escherichia coli was detd. using a 1st probe tailed with 130 unlabeled dA residues capable of binding to dT10 residues immobilized on a magnetic bead support and a 2nd probe capable of binding to the same target 20 nucleotides downstream from the site of ***hybridization*** of the 1st probe. The 2nd probe was labeled by tailing with [32P]dCTP and [32P]dGTP. The tailed 1st probe and labeled 2nd probe were incubated with heat-denatured restriction fragments of the toxin gene. After a 15-min ***hybridization*** period, the samples were incubated 3 times with the dT-derivatized magnetic beads. The beads were magnetically immobilized and washed and target-probe complex was ***eluted*** after each of the incubations. The 3rd eluate was passed through dT3000-nylon and the target-probe complex was detected by autoradiog. The abs. sensitivity was .apprx.10-18 mol toxin gene; the overall efficiency of ***capture*** of the target was .ltorsim.5%; and the redn. of background was 107-fold.

L10 ANSWER 83 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1990:494345 CAPLUS <<LOGINID::20071120>>
DN 113:94345
TI Process for forming and using gel microdroplets
IN Weaver, James C.; Williams, Gregory B.; Bliss, Jonathan G.; Powell, Kevin T.; Harrison, Gail I.; Joseph, Julian
PA Massachusetts Institute of Technology, USA
SO PCT Int. Appl., 151 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- -------
PI WO 8910566 A1 19891102 WO 1989-US1699 19890421 W: AT, AU, BB, BG, BR, CH, DE, DK, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG US 4959301 A 19900925 US 1988-185083 19880422 US 5055390 A 19911008 US 1988-185156 19880422 US 5225332 A 19930706 US 1988-184969 19880422 AU 8935567 A 19891124 AU 1989-35567 19890421 EP 411038 A1 19910206 EP 1989-905521 19890421 R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE JP 03503845 T 19910829 JP 1989-505255 19890421
PRAI US 1988-184968 A 19880422 US 1988-184969 A 19880422 US 1988-185083 A 19880422 US 1988-185084 A 19880422 US 1988-185136 A 19880422 US 1988-185156 A 19880422 US 1988-185160 A 19880422 US 1988-185475 A 19880422 WO 1989-US1699 A 19890421
AB Gel microdroplets (GMDs) are formed contg. biol. entities (e.g. cells, vesicles, spores, organelles, viruses, nucleic acid, etc.) and binding sites. The GMDs are useful in ***capturing*** mols. ***released*** from the biol. entities, in measuring the ***captured*** mols., in measuring biol. entities, in detg. the effect of compds. on the growth of the biol. entities, in detg. the no. of viable biol. entities per vol. of sample, in measuring biol. entities in a sample contg. .gtoreq.2 types of biol. entities, in isolation of cells, etc. Processes for chem. and phys. manipulation of the GMDs are also disclosed. Agarose was combined with RPMI 1640 medium supplemented with 10% fetal calf serum, heated in a 90.degree. water bath to cause melting, cooled in a 37.degree. water bath, mixed with polystyrene beads coated with goat anti-mouse IgG, mixed with mouse ***hybridoma*** cells, mixed with mineral oil to create liq. microdroplets, and chilled in a 0.degree. water bath to cause agarose gelation and GMD formation. The GMDs were incubated in culture medium, rinsed with phosphate-buffered saline, and incubated for 30 min with buffer contg. fluorescein conjugated with goat anti-mouse IgG. GMDs with entrapped beads and ***hybridoma*** cells showed many bright green speckles by microscopy.

L10 ANSWER 84 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1990:401527 CAPLUS <<LOGINID::20071120>>
DN 113:1527
TI Selective enrichment of a large size genomic DNA fragment by affinity ***capture*** : an approach for genome mapping
AU Kandpal, Rajendra P.; Ward, David C.; Weissman, Sherman M.
CS Sch. Med., Yale Univ., New Haven, CT, 06510, USA

SO Nucleic Acids Research (1990), 18(7), 1789-95 CODEN: NARHAD; ISSN: 0305-1048
DT Journal
LA English
AB A method to enrich large size DNA fragments obtained by digestion with rare cutting restriction endonucleases was developed and applied for the isolation of a 150 kb SfiI fragment contg. the .beta.-globin gene cluster. The digested DNA is rendered single stranded at the ends by diffusing a strand specific exonuclease into an agarose plug contg. DNA. The plug is melted and soln. ***hybridization*** is then performed with a bridge RNA contg. specific sequences from the end of a desired fragment linked to a common probe sequence. The common probe sequence is annealed to a biotinylated RNA and the resulting tripartite ***hybrid*** is retained onto a solid matrix contg. avidin and specifically ***released*** by RNase action. Enrichments of greater than 350 fold have been achieved consistently. Such directed purifn. of large DNA fragments without cloning can considerably expedite mapping and gene localization in a complex genome and facilitate the construction of sublibraries from defined regions of the genome.

L10 ANSWER 85 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1990:154372 CAPLUS <<LOGINID::20071120>>
DN 112:154372
TI Rapid and sensitive low pressure chromatographic enzyme detection and measurement system
IN Ward, N. Robert, Jr.; Lozier, Philip J.
PA Biocontrol Systems, Inc., USA
SO Eur. Pat. Appl., 21 pp. CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI EP 335354 A2 19891004 EP 1989-105499 19890329
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
US 5206139 A 19941011 US 1988-174848 19880329
JP 02023898 A 19900126 JP 1989-77933 19890329
PRAI US 1988-174848 A 19880329
AB A method for enhancing the detection of a bound enzyme generated in a reaction system comprises (1) adding a substrate in a selected soln. to a 1st column contg. an enzyme bound to a solid phase, (2) incubating the 1st column to enzymically convert the substrate to product in an amt. proportional to the amt. of enzyme present, (3) transferring the product and unreacted substrate onto a 2nd column of .ltoreq.500 theor. plates and which contains a sorbent capable of selectively binding the product in the presence of the selected soln., (4) selectively ***eluting*** the product from the sorbent, and (5) detecting the presence or concn. of the product. Devices and related detection methods are described. The methods and devices can detect and measure (1) the amt. of enzyme present as a detecting system following a nucleic acid ***hybridization*** reaction or immunoreaction, (2) the level and activity of free enzyme in a biol. sample, (3) the level of enzyme from contaminating microorganisms present in a sample, and (4) enzymes from pure culture isolates for microbial identification and antimicrobial susceptibility testing. Thus, a .beta.-galactosidase-labeled DNA ***hybridization*** probe was prepd. A 26-mer complement to the enzyme labeled probe was linked to carboxy-modified latex beads, and these were ***hybridized*** with varying concns. of the probe. The reacted beads were washed, then added to the 1st column (if the ***hybridization*** was not already conducted in the 1st column). Methylumbellifenyl-.beta.-D-galactoside (MUGAL) was added and the 1st column was incubated at 37.degree. for 20 min. The substrate MUGAL and methylumbelliferone (MU) product were then flushed into the 2nd column with 30% MeOH in H2O at 0.5 mL/min. The 2nd column, contg. PRP-1 sorbent (50-200 theor. plates), was ***eluted*** 1st with H2O to remove MUGAL, then with 100% MeOH to remove MU, which was then detd. by flow fluorometry. The amt. of MU produced was directly proportional to the amt. of target DNA in the sample that was ***captured*** onto the solid support.

L10 ANSWER 86 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:628416 CAPLUS <<LOGINID::20071120>>
DN 111:228416
TI Rapid isolation of DNA from complex biological samples using a novel ***capture*** reagent-methidium-spermine-Sepharose
AU Harding, John D.; Gebeyehu, Gulilat; Bebee, Robert; Simms, Domenica; Klevan, Leonard
CS Bethesda Res. Lab., Life Technol. Inc., Gaithersburg, MD, 20877, USA
SO Nucleic Acids Research (1989), 17(17), 6947-58 CODEN: NARHAD; ISSN: 0305-1048
DT Journal
LA English
AB The authors synthesized and analyzed the functional properties of a novel DNA ***capture*** reagent contg. a methidium moiety attached to a Sepharose bead by a spermine linker. DNA present in a biol. fluid or other complex sample binds to the reagent. The DNA- ***capture*** reagent complex is then sepd. from the sample by centrifugation and the DNA is ***released*** from the reagent by brief incubation in 0.1-0.5N NaOH or KOH. ***Capture*** of DNA from complex samples is independent of the salt concn. of the sample, and occurs in the presence of high concns. of EDTA, proteinase K, and detergents. Many samples can be processed simultaneously. The following specific applications, in which denatured DNA is quantitated or characterized, are demonstrated: (1) isolation of hepatitis B virus DNA from serum and quantitation by dot-blot ***hybridization*** , (2) isolation and quantitation of DNA from urine, (3) isolation of human genomic DNA from 1 .mu.L of blood or 100 HeLa cells followed by amplification of a specific gene sequence using the polymerase chain reaction, and (4) isolation of single-stranded phage M13 sequencing templates from bacterial cultures. Apparently, a ***capture*** reagent contg. an intercalating moiety bound to a solid support may be useful for many applications in mol. biol. and mol. diagnostics.

L10 ANSWER 87 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:628224 CAPLUS <<LOGINID::20071120>>
DN 111:228224
TI A noise-free molecular ***hybridization*** procedure for measuring RNA in cell lysates
AU Thompson, James; Solomon, Robert; Pellegrino, Michael; Sakai, Koji; Lewin, Mark; Feild, Maggie; Castrovinci, Margaret; Sacramone, Lawrence; Gillespie, David
CS Dep. Neoplastic Dis., Hahnemann Univ., Philadelphia, PA, 19102, USA
SO Analytical Biochemistry (1989), 181(2), 371-8 CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English

AB A soln. ***hybridization*** technique was designed to measure RNA abundance in crude cell lysates and at the same time to maximize confidence that signals resulted from true mol. ***hybridization*** . Cell lysates were prepd. in 5M guanidine thiocyanate, then RNA mols. in the lysates were ***hybridized*** with 2 probes, a 32P-labeled RNA label probe which provided signal and an oligodeoxyribonucleotide ***capture*** probe contg. a poly(dA) tail which provided a mechanism for selective purifn. Ternary ***hybrids*** were ***captured*** on oligo(dT)-coated superparamagnetic beads through a readily reversible interaction with the poly(dA) of the ***capture*** probe. RNA did not bind to dT beads through poly(A) under the ***capture*** conditions used. ***Hybrids*** were purified through cycles of ***capture*** on and ***release*** from dT beads, with each cycle yielding a 100-1000-fold redn. in noise (unhybridized label probe) and a 50-90% recovery of signal (***hybridized*** label probe). Noise was driven below detectable limits after 3 cycles of ***capture*** , thereby improving the sensitivity of measuring target RNA. As few as 15,000 target mols., 15 fg of a 3-kb RNA, was detectable in the equiv. of 2 .times. 106 cells in concd. cell lysates (108 cells/mL). Since ***hybridization*** with both probes was required to yield a signal, ***hybridization*** specificity could be adjusted with either or both probes. The greater specificity and lack of noise increased confidence that the signal was proportional to the amt. of RNA of interest.

L10 ANSWER 88 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:628223 CAPLUS <<LOGINID::20071120>>
DN 111:228223
TI Nucleic acid ***hybridization*** assays employing dA-tailed ***capture*** probes. II. Advanced multiple ***capture*** methods
AU Hunsaker, William R.; Badri, Hummy; Lombardo, Massimo; Collins, Mark L.
CS Gene-Trak Syst., Framingham, MA, 01701, USA
SO Analytical Biochemistry (1989), 181(2), 360-70 CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
AB A 4th ***capture*** is added to the reversible target ***capture*** procedure of the preceding paper. This results in an improved radioisotopic detection limit of 7.3 .times. 10-21 mol of target. In addn., the std. triple ***capture*** method is converted into a nonradioactive format with a detection limit of <1 amol of target. The principal advantage of nonradioactive detection is that the entire assay can be performed in .apprx.1 h. Nucleic acids are ***released*** from cells in the presence of the ***capture*** probe which contains a 3'-poly(dA) sequence and the labeled probe which contains a detectable nonradioactive moiety such as biotin. The target is further purified from sample impurities and excess labeled probe by recapture either once or twice more on fresh magnetic particles. The highly purified target is then concd. to 200 nL by recapture onto a poly(dT) nitrocellulose filter and rapidly detected with streptavidin-alk. phosphatase using bromochloroindolyl phosphate and nitroblue tetrazolium. Using this procedure, as little as 0.25 amol of a target plasmid has been detected nonradioactively in crude samples in just 1 h without prior purifn. of the DNA and RNA. Finally, a new procedure called background ***capture*** is introduced to complement the background-reducing power.

L10 ANSWER 89 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:628222 CAPLUS <<LOGINID::20071120>>
DN 111:228222
TI Nucleic acid ***hybridization*** assays employing dA-tailed ***capture*** probes. I. Multiple ***capture*** methods
AU Morrissey, David V.; Lombardo, Massimo; Eldredge, John K.; Kearney, Kevin R.; Groody, E. Patrick; Collins, Mark L.
CS Gene-Trak Syst., Framingham, MA, 01701, USA
SO Analytical Biochemistry (1989), 181(2), 345-59 CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
AB A quant. ***hybridization*** assay termed "reversible target ***capture*** " is described. The technique is designed to extensively purify the target nucleic acid from crude cell lysates in .apprx.1 h without phenol extn. Simple, rapid methods are described that explain how each process in the assay is optimized. The procedure involves ***hybridizing*** the target nucleic acid in soln. with dA-tailed ***capture*** probe and a labeled probe. The ***capture*** probe-target-labeled probe "ternary complex" is then ***captured*** on magnetic beads contg. oligo(dT). After the excess unhybridized labeled probe, cell debris, and other sample impurities are washed away, the intact ternary complex is further purified by chem. ***elution*** from the beads and recapture on fresh beads. The ternary complex is then ***eluted*** thermally and recaptured on a 3rd set of beads or on poly(dT) filters. This triple ***capture*** method results in a detection limit of .apprx.0.2 amol (100 fg) of targets with 32P-labeled riboprobes. This is .apprx.1000-fold more sensitive than sandwich assays employing only a single ***capture*** step. The method is illustrated by detecting Listeria cells in the presence of heterologous bacteria. With 3 rounds of target ***capture*** , as few as 6 Listeria cells have been detected in the presence of 1.25 .times. 107 control cells.

L10 ANSWER 90 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:590590 CAPLUS <<LOGINID::20071120>>
DN 111:190590
TI Nucleic acid ***hybridization*** assays employing dA-tailed ***capture*** probes. Single ***capture*** methods
AU Morrissey, David V.; Collins, Mark L.
CS Gene-Trak Systems, Framingham, MA, 01701, USA
SO Molecular and Cellular Probes (1989), 3(2), 189-207 CODEN: MCPRE6; ISSN: 0890-8508
DT Journal
LA English
AB Several novel ***hybridization*** techniques are described. Cells or specimens are treated to ***release*** nucleic acids and a liq. phase ***hybridization*** is carried out with a dA-tailed ***capture*** probe and a reporter probe in chaotropic salts or in salts contg. SDS/proteinase K. In another format the tailed ***capture*** probe is preimmobilized on polystyrene and used to ***capture*** target nucleic acids from the soln. No phenol extn. or centrifugation is required to prep. the nucleic acids. ***Capture*** of the target on the poly (dT)-solid supports is used to remove excess labeled probe and sample impurities prior to non-radioisotopic or radioisotopic detection. This paper shows the advantage of a single round of ***capture*** on polystyrene, including the ability to assay large nos. of samples manually, the ability to analyze each sample for many analytes simultaneously, the use of rapid non-radioisotopic detection, and the ability to readily adapt the assay for automation.

L10 ANSWER 91 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:570309 CAPLUS <<LOGINID::20071120>>
DN 111:170309
TI Quantitative assays based on the use of replicatable ***hybridization*** probes
AU Lomeli, Hilda; Tyagi, Sanjay; Pritchard, Cynthia G.; Lizardi, Paul M.; Kramer, Fred Russell
CS Cent. Invest. Ing. Genet. Biotecnolo., Univ. Nac. Auton. Mexico, Cuernavaca, 62270, Mex.
SO Clinical Chemistry (Washington, DC, United States) (1989), 35(9), 1826-31 CODEN: CLCHAU; ISSN: 0009-9147
DT Journal
LA English
AB Amplifiable ***hybridization*** probes, mols. with a probe sequence embedded within the sequence of a replicatable RNA, will promote the development of sensitive clin. assays. To demonstrate their utility, a recombinant RNA was prepd. that contained a 30-nucleotide-long probe complementary to a conserved region of the pol gene in human immunodeficiency virus type 1 (HIV-1) mRNA. Test samples were prepd., each contg. a different no. of HIV-1 transcripts that served as simulated HIV-1 mRNA targets. ***Hybridizations*** were carried out in a soln. contg. the chaotropic salt, guanidine thiocyanate. Probe-target ***hybrids*** were isolated by reversible target ***capture*** on paramagnetic particles. The probes were then ***released*** from their targets and amplified by incubation with the RNA-directed RNA polymerase, Q.beta. replicase (EC 2.7.7.48). The replicase copied the probes in an exponential manner: after each round of copying, the no. of RNA mols. doubled. The amt. of RNA synthesized in each reaction (.apprx.50 ng) was sufficient to measure without using radioisotopes. Kinetic anal. of the reactions demonstrated that the no. of HIV-1 targets originally present in each sample could be detd. by measuring the time it took to synthesize a particular amt. of RNA (the longer the synthesis took, the fewer the no. of targets originally present). The results suggest that clin. assays involving replicatable ***hybridization*** probes will be simple, accurate, sensitive, and automatable.

L10 ANSWER 92 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:549727 CAPLUS <<LOGINID::20071120>>
DN 111:149727
TI Probes for quantitating subpicogram amounts of HIV-1 RNA by molecular ***hybridization***
AU Gillespie, David; Thompson, James; Solomon, Robert
CS Dep. Neoplast. Dis., Hahnemann Univ., Philadelphia, PA, 19102, USA
SO Molecular and Cellular Probes (1989), 3(1), 73-86 CODEN: MCPRE6; ISSN: 0890-8508
DT Journal
LA English
AB A set of probes was designed for the quantitation of human immunodeficiency virus 1 (HIV-1) RNA in infected cells by a mol. ***hybridization*** procedure called reversible target ***capture*** . Reversible target ***capture*** is analogous to sandwich ***hybridization*** , except that the link between ***hybrid*** complexes and the affinity support was reversible, allowing for repeated ***capture*** of ***hybrids*** on, and ***release*** from, fresh affinity support. Repeated cycles of ***capture*** resulted in a high degree of purifn. of ***hybrids*** from unreacted probe, thereby greatly reducing assay noise and increasing assay sensitivity. Probes against the HIV-1 pol gene were chosen because their target sequences were highly conserved among HIV-1 isolates, while being divergent enough to provide discrimination from other human T-cell tropic viruses. Subpicogram quantities of HIV-1 pol gene RNA were measured with signal:noise ratios of over 10. ***Hybridization*** signal increased with increasing target RNA with a proportionality const. of 1.

L10 ANSWER 93 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:188924 CAPLUS <<LOGINID::20071120>>
DN 110:188924
TI Method of separating activated human protein C by immunosorption chromatography
IN Wakabayashi, Kenji; Sumi, Yoshihiko; Ichikawa, Yataro; Sakata, Yoichi; Aoki, Nobuo
PA Teijin Ltd., Japan
SO Eur. Pat. Appl., 9 pp. CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- --------
PI EP 287028 A2 19881019 EP 1988-105800 19880412 EP 287028 A3 19900926 EP 287028 B1 19930721 R: BE, CH, DE, FR, GB, LI, SE DK 8802092 A 19881018 DK 1988-2092 19880415 DK 171679 B1 19970310 NO 8801650 A 19881018 NO 1988-1650 19880415 NO 174056 B 19931129 NO 174056 C 19940309 JP 01085091 A 19890330 JP 1988-93450 19880418 US 1148 H 19930302 US 1992-815870 19920103
PRAI JP 1987-93377 A 19870417 US 1988-181424 A1 19880414
AB A method of sepg. activated human protein C (I) comprises bringing a mixt. contg. I having a .gamma.-carboxyglutamic acid (Gla) domain in the presence of Ca2+ into contact with a fixed antibody comprising an insol. carrier conjugated to antibody to a complex of I and Ca2+ bound to the Gla domain, whereby I is ***captured*** by the fixed antibody in the form in which the Ca2+ is bound to the Gla domain. ***Hybridomas*** were produced by conventional technique, by fusing mouse myeloma P3U1 with spleen cells of female BALB/c mice immunized with human protein C. Monoclonal antibodies 6H2 (I-binding, Ca-dependent) and 10H11 (I-nonbinding) were isolated from ascites fluid and conjugated to Sepharose 4B. A mixt. of thrombin and thrombomodulin 30 (1.5U), 1% bovine serum albumin 300, and purified human protein C 720 .mu.g/mL 30 .mu.L was incubated at 37.degree. for 90 min to activate protein C. The mixt was then passed through a 10H11-Sepharose 4B column followed by a 6H2-Sepharose 4B column (both columns equilibrated and washed with Tris-HCl 0.05, NaCl 0.15M, CaCl2 5mM, pH 7.4). I was ***eluted*** from the 2nd column with Tris-HCl 0.06, NaCl 0.15M, EDTA 20mM (pH 7.4). The recovered I contained no unactivated protein C.

L10 ANSWER 94 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:31970 CAPLUS <<LOGINID::20071120>>
DN 110:31970
TI Extended state mobility and tail state distribution of amorphous hydrogenated germanium-silicon (Si1-xGex:H) alloys
AU Nebel, C. E.; Weller, H. C.; Bauer, G. H.
CS Inst. Phys. Elektron., Univ. Stuttgart, Stuttgart, D-7000/80, Fed. Rep. Ger.

SO Materials Research Society Symposium Proceedings (1988), 118(Amorphous Silicon Technol.), 507-12 CODEN: MRSPDH; ISSN: 0272-9172
DT Journal
LA English
AB Time-of-flight (TOF) and charge collection measurements are evaluated to det. electron transport quality of a-Si1-xGex:H for 0 .ltoreq. x .ltoreq. 0.3. The drift mobility data are used to calc. the tail state distribution at the conduction band, which is of ***hybrid*** structure (flat linear followed by a steep exponential decay). By incorporation of Ge, addnl. localization introduced by chem. disorder broadens the band tail. The dangling bond d., calcd. from electron .mu.D.tau.e products, also dramatically increases. Both effects contribute to the drop of photoelectronic quality of a-Si1-xGex:H alloys. In addn., the extended state mobility deduced from TOF expts. reflects a tunneling transport mechanism in localized states above a dominant transport level that separates states with high tunnel probability from states where carriers propagate via thermal ***release*** from and ***capture*** into localized states.

L10 ANSWER 95 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1988:489343 CAPLUS <<LOGINID::20071120>>
DN 109:89343
TI Target and background ***capture*** methods and apparatus for affinity assays
IN Collins, Mark Leo
PA Amoco Corp., USA
SO Eur. Pat. Appl., 29 pp. CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- --------
PI EP 265244 A2 19880427 EP 1987-309308
19871021 EP 265244 A3 19890510 EP 265244
B1 19920923 R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE ZA 8707772 A 19880629 ZA 1987-7772
19871015 CA 1309329 C 19921027 CA 1987-549737
19871020 AT 80949 T 19921015 AT 1987-309308
19871021 AU 8780097 A 19880428 AU 1987-80097
19871023 AU 621812 B2 19920326 CN 87107800
A 19880713 CN 1987-107800 19871023 CN 1016645
B 19920513 JP 63188399 A 19880803 JP 1987-268030 19871023 JP 2975603 B2 19991110 US 5780224 A 19980714 US 1994-236877
19940429 US 5750338 A 19980512 US 1994-238080
19940503 US 5714380 A 19980203 US 1996-622491
19960325 US 37891 E1 20021022 US 2000-533906 20000308
PRAI US 1986-922155 A 19861023 EP 1987-309308 A 19871021 US 1987-136920 B2 19871221 US 1990-550147 B1 19900709 US 1991-644967 B2 19910122 US 1991-648468 B1 19910131 US 1992-859619 B1 19920323 US 1992-946749 B1 19920917 US 1993-6804 B1 19930121 US 1993-124826 B1 19930921 US 1994-238080 A5 19940503 US 1994-257469 B1 19940608 US 1995-400657 A3 19950308
AB A target mol. (ligand) is detected by ***capturing*** it with a specific probe bound to a dispersible, retrievable support and sepg. the support from the medium. In various embodiments, (1) the ligand is dissocd. from the support in a second medium and contacted with a second support-bound probe, the dissocn.-binding cycle is repeated as necessary to eliminate background noise due to nonspecific binding, and the ligand is contacted with a labeled probe for detection; (2) the ligand is contacted with a first support-bound probe and second labeled probe, the support is sepd. from the medium, and the complex of ligand with first and second probes is dissocd. from the support; (3) for background ***capture*** , medium contg. target-probe complex and uncomplexed probe is contacted with a support which selectively binds uncomplexed probe, and the support is then sepd. from the target-probe complex; (4) multiple targets are detected by contacting the sample with probes for all the targets, each of which can bind to a specific support, where the supports can be sepd. from each other to sep. the individual target compds. A target ***capture*** assay for the XbaI-HindIII fragment of enterotoxigenic gene eltAI of Escherichia coli was performed using (1) as first probe, a synthetic 30-mer oligonucleotide comprising positions 532-561 in the gene sequence, tailed with 130 unlabeled dA residues; (2) Bio-Mag magnetic beads with amine functional groups linked via glutaraldehyde to an ethylenediamine adduct of T10; (3) as second probe, a synthetic 30-mer oligonucleotide comprising positions 483-512 in the gene sequence, labeled by tailing with dCTP-32P and dGTP-32P. The heat-denatured target DNA was incubated with the first and second probes at 65.degree. for 15 min in 1.4M NaCl for ***hybridization*** . Then the T10-derivatized magnetic beads were added, incubated for 5 min, magnetically immobilized, and washed, and the target-probe complex was ***eluted*** with 0.20M phosphate buffer (pH 6.8) at 60.degree.. The ***capture*** - ***elution*** cycle was repeated twice, and the final eluate was passed through a nylon membrane bearing immobilized T3000 to ***capture*** the target-probe complex for autoradiog. The background was reduced by a factor of 107 by this procedure, allowing a sensitivity of 10-18 mol of the eltAI gene. The overall efficiency of the recovery of labeled target-probe complex was 1-2%.

L10 ANSWER 96 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1988:109218 CAPLUS <<LOGINID::20071120>>
DN 108:109218
TI Displacement polynucleotide methods, reagent complex, and diagnostic kits
IN Collins, Mary; Dougherty, Joseph P.; Fritsch, Edward Francis; Jacobs, Kenneth A.
PA Genetics Institute, Inc., USA
SO PCT Int. Appl., 75 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------- ---- -------- ---------- --------
PI WO 8703911 A1 19870702 WO 1986-US2788
19861217 W: AU, JP RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE US 4752566 A 19880621 US 1985-809992
19851217 AU 8768341 A 19870715 AU 1987-68341
19861217 EP 286642 A1 19881019 EP 1987-900593
19861217 R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
PRAI US 1985-809971 A 19851217 US 1985-809992 A 19851217 WO 1986-US2788 A 19861217
AB Diagnostic assay methods, reagents, and kits for detecting the presence of a target nucleotide sequence (TNS) in a biol. sample by displacement polynucleotide methods are disclosed. In 1 method, a reagent complex, comprising a labeled probe having a target binding region (TBR) and an immobilized or immobilizable 2nd polynucleotide which binds to the probe in at least a portion of the TBR, is contacted with sample, TNS in

sample displaces the 2nd polynucleotide on the complex, intact complex is sepd. from probe-TNS ***hybrids*** , and the ***hybrids*** are detected. A 2nd method involves ***capturing*** the labeled strand after displacement from the probe which binds to the TNS. Single strand p66b DNA (constructed by gel-isolating the double-stranded PvuII fragment contg. the sequence for the entire displacement complex from pMLC12/13.delta.M7IVRTL and ligating it to the gel-isolated PvuII backbone of the M13 origin plasmid pUC119) was digested to completion with BamHI. The covalent complex (contg. a TBR for human albumin) was isolated by gel purifn. and then labeled by ligating a 32P-kinased oligonucleotide to the 3' end of the complex. Kinased complex was incubated in the presence or absence of 0.01 pm HaeIII-cut mp8.A11Alb (contg. human albumin cDNA sequence) with 0.1 pm of ***capture*** DNA in 20 .mu.L of ***hybridization*** buffer (NaCl 0.3, Tris-HCl 0.1 M, pH 8.0, and EDTA 10 mM) for 60 min at 65.degree.. Reactions were analyzed by gel electrophoresis and autoradiog. In the absence of target, no detectable background ***capturing*** was obsd. The addn. of target with 0.01 pm complex resulted in 100% displacement and 100% ***capture*** with mp7.delta.AlbXba1+ ***capturer*** .

L10 ANSWER 97 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1987:13055 CAPLUS <<LOGINID::20071120>>
DN 106:13055
TI A rapid quantitative capillary tube enzyme immunoassay for human chorionic gonadotropin in urine
AU Nagainis, Peter A.; Nakagawa, Carol H.; Baron, Sandra L.; Fuller, Steven A.; Chandler, Howard M.; Hurrell, John G. R.
CS Diagn. Div., Allelix Inc., Mississauga, ON, L4V 1P1, Can.
SO Clinica Chimica Acta (1986), 160(3), 273-9 CODEN: CCATAR; ISSN: 0009-8981
DT Journal
LA English
AB A quant. capillary tube enzyme immunoassay (CTEIA) method for the detn. of human urinary chorionic gonadotropin (hCG) [9002-61-3] was developed. The method utilizes an antibody-coated capillary tube through which the test fluid is passed and a urease [9002-13-5]-labeled 2nd antibody in an immunometric format. Any hCG in the test soln. is ***captured*** by the immobilized antibody which is ***hybridoma*** -derived and specific for the .beta.-subunit of hCG. The 2nd hCG-specific antibody, conjugated to the enzyme urease, is used to detect the ***captured*** hCG on the internal surface of the capillary tube. The amt. of urease bound to the surface is detd. by the introduction of a substrate soln. contg. urea and the pH indicator bromothymol blue. The rate of color change, from yellow to blue, caused by the ***release*** of NH3 from urea by urease, is detd. in a spectrophotometer using a cell holder adapted to accommodate capillary tubes. The initial rate of absorbance change is directly proportional to the concn. of hCG in the sample in the range 0-100 mIU/mL. The test can detect concns. of hCG as low as 10 mIU/mL in 5 min.

L10 ANSWER 98 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1986:568472 CAPLUS <<LOGINID::20071120>>
DN 105:168472
TI Identification of nucleic acids
IN Soderlund, Hans Erik
PA Orion-Yhtyma Oy, Finland
SO Belg., 12 pp. CODEN: BEXXAL
DT Patent
LA French

FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI BE 903937 A1 19860416 BE 1985-216059 19851224 FI 8500004 A 19860703 FI 1985-4 19850102 FI 72146 B 19861231 FI 72146 C 19870413 CH 666696 A5 19880815 CH 1985-5378 19851217 GB 2169403 A 19860709 GB 1985-31414 19851220 GB 2169403 B 19880608 NO 8505308 A 19860703 NO 1985-5308 19851227 NO 166743 B 19910521 NO 166743 C 19910828 JP 61185200 A 19860818 JP 1985-299797 19851227 JP 06069400 B 19940907 HU 40166 A2 19861128 HU 1985-5030 19851229 HU 196453 B 19881128 FR 2575493 A1 19860704 FR 1985-19394 19851230 FR 2575493 B1 19900126 DE 3546312 A1 19860710 DE 1985-3546312 19851230 DE 3546312 C2 19920806 ZA 8509895 A 19860827 ZA 1985-9895 19851230 RO 94651 B3 19880630 RO 1985-121637 19851230 AT 8503767 A 19930915 AT 1985-3767 19851230 AT 397514 B 19940425 AU 8551748 A 19860717 AU 1985-51748 19851231 AU 561382 B2 19870507 NL 8503597 A 19860801 NL 1985-3597 19851231 NL 189427 B 19921102 NL 189427 C 19930401 CA 1271705 A1 19900717 CA 1985-498834 19851231 IL 77489 A 19910131 IL 1985-77489 19851231 DK 8600003 A 19860703 DK 1986-3 19860102 DK 164932 B 19920907 DK 164932 C 19930125 SE 8600011 A 19860703 SE 1986-11 19860102 SE 463212 B 19901022 SE 463212 C 19910214
PRAI FI 1985-4 A 19850102
AB A rapid method for the identification of nucleic acids utilizes .gtoreq.2 ***hybridization*** probes in soln. phase. The first (detection) probe is labeled with a detectable marker and the second (***capture***) probe is attached to a member (e.g. biotin) of an affinity pair such as biotin-streptavidin. A sample contg. the target nucleic acid is mixed with the detection and the ***capture*** probes in an appropriate soln., and the mixt. contg. the ***hybridized*** material is contacted with the other member (e.g. streptavidin) of the affinity pair bound to a support, thereby transferring the specifically ***hybridized*** labeled probe from the soln. phase to the solid phase. The labeled probe is ***eluted*** from the support and the eluate is analyzed for the label, which is related to the presence of the target nucleic acid.

L10 ANSWER 99 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1984:468853 CAPLUS <<LOGINID::20071120>>
DN 101:68853
TI A method for recovering strand-specific probes from nick-translated DNA fragments
AU Dutton, F. Lee; Chovnick, Arthur
CS Genet. Cell. Mol. Biol. Sect., Univ. Connecticut, Storrs, CT, 06268, USA
SO Analytical Biochemistry (1984), 140(1), 121-8 CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
AB A method of prepg. strand-specific probes for DNA-DNA or DNA-RNA ***hybridizations*** is described. Double-stranded DNA fragments are first isolated from any recombinant DNA clone contg. the desired sequence and then labeled in vitro by nick-translation (Maniatis, T. et al., 1975; Rigby, P. W. J. et al., 1977). Sequences homologous to the desired strand are

captured by annealing the denatured nick-translate to viral strands of an appropriate M13 clone and recovered by ***elution*** of the resulting ***hybrids*** from a column of agarose A50M (Bio-Rad). By this method, sep. probes with specificity to either strand, as well as the double-stranded probe, may conveniently be prepd. from a single nick-translation reaction. Probes may be obtained which are homologous either to the full length of the cloned region or to selected portions thereof by selecting appropriate M13 clones for annealing. The probe is recovered as a population of fragments several hundred bases or less in length, which are ideal for satg. liq. ***hybridizations*** , and should be similarly well suited for in situ ***hybridizations*** to cytol. prepns.

L10 ANSWER 100 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1984:110483 CAPLUS <<LOGINID::20071120>>
DN 100:110483
TI Actinide burning studies related to ***hybrid*** reactors
AU Sahin, Suemer; Kumar, Anil
CS Inst. Gen. At., Swiss Fed. Inst. Technol., Lausanne, CH-1015, Switz.
SO Energy Research (1983), 3(Altern. Energy Sources 5, Pt. E), 47-58 CODEN: ENRSD7; ISSN: 0167-692X
DT Journal
LA English
AB The performance of ***hybrid*** blankets consisting of actinides, as nuclear waste products of LWRs, was compared with those contg. std. nuclear fuel, such as U and Th. From the viewpoint of energy multiplication and fusile and fissile fuel prodn., the actinides have much higher performance under 14-MeV n irradn. compared with std. nuclear fuels, because their neutronic properties at higher energies are very favorable. Actinides in ***hybrid*** blankets are burnt partly through the fission process, ***releasing*** a large amt. of nuclear energy and partly they are converted through n ***capture*** to new nuclear fuels with excellent neutronic properties. It is therefore worthwhile to bive adequate credit to the ***hybrid*** blankets, contg. actinides which are otherwise (as nuclear waste materials) only a nuisance.

L10 ANSWER 101 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1981:430711 CAPLUS <<LOGINID::20071120>>
DN 95:30711
TI ***Hybrid*** antibodies with dual specificity for the delivery of ricin to immunoglobulin-bearing target cells
AU Raso, Vic; Griffin, Thomas
CS Div. Tumor Immunol., Sidney Farber Cancer Inst., Boston, MA, 02115, USA
SO Cancer Research (1981), 41(6), 2073-8 CODEN: CNREA8; ISSN: 0008-5472
DT Journal
LA English
AB ***Hybrid*** antibodies possessing one binding site for the toxic lectin ricin and a companion site directed against human Ig were constructed in vitro. This bifunctional reagent specifically attached to human lymphocyte surface Ig determinants and, thus situated, could simultaneously ***capture*** ricin mols. or its toxic A chain. Attachment of these components to the cells was revealed by specific fluorescein-labeled antibodies. Once concd. at the target cell membrane, ***hybrid*** -bound toxin was subsequently ***released*** to function via its normal mechanism of biol. action. It gained access to ribosomes, its intracellular target, and curtailed protein synthesis. Toxicity was not augmented for Ig-neg. cells to which ***hybrid*** could not bind and free human IgG could competitively block the enhanced effects obsd. for Ig-bearing cell lines. Thus, ***hybrid*** antibodies may be utilized to carry active agents within close proximity to the membrane of a specified cell type and thereby selectively enhance their effect.

L10 ANSWER 102 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1978:605865 CAPLUS <<LOGINID::20071120>>
DN 89:205865
TI Tritium handling in the Mirror Fusion ***Hybrid*** Reactor
AU Galloway, Terry R.
CS Lawrence Livermore Lab., Livermore, CA, USA
SO Proceedings - Symposium on Engineering Problems of Fusion Research (1977), 7(2), 1191-7 CODEN: PSERDR; ISSN: 0145-5958
DT Journal
LA English
AB A ref. design study for a Mirror Fusion ***Hybrid*** Reactor was completed which examines the T handling problems. Breeding pins composed of Al alloys contain LiH with a 4-yr residence time for T prodn. The slip-stream He-T ***capture*** system is designed to handle a 0.1% pin failure and will reduce environmental losses to <3 Ci/day. The neutral beam injectors and direct converters utilize small, thin electrode tubes at 700.degree. for accelerating the D or T, and they will by t implantation permeate about 3 .times. 105 Ci/day into the internal He coolant flow. A ***capture*** system will reduce these losses to 6 Ci-day, combined. The reactor hall is designed with a low humidity, air atm. which is continuously processed to handle leakage and permeability losses from the nuclear island at 180 Ci/day while still maintaining levels of T below max. permissible concns. The processor is also able to handle severe accidental ***releases*** of T at the 26 kg level and permit worker re-entry (with ventilated suits) in a matter of about .apprx.1/wk. These approaches to fusion power plants are tech. feasible today and economically attractive.

L10 ANSWER 103 OF 103 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1978:432562 CAPLUS <<LOGINID::20071120>>
DN 89:32562
TI Tritium handling in the Mirror Fusion ***Hybrid*** Reactor
AU Galloway, T. R.
CS Lawrence Livermore Lab., Univ. California, Livermore, CA, USA
SO Report (1977), UCRL-79740, 8 pp. Avail.: NTIS From: Energy Res. Abstr. 1978, 3(8), Abstr. No. 20733
DT Report
LA English
AB A ref. design study for a Mirror Fusion ***Hybrid*** Reactor was completed which examd. T-handling problems. Breeding pins composed of Al alloys contain LiH with a 4-yr residence time for T prodn. The slip-stream He-T ***capture*** system is designed to handle a 0.1% pin failure and will reduce environmental losses to <3 Ci/day. The neutral beam injectors and direct converters utilize small, thin electrode tubes at 700.degree. for accelerating the D or T, and they will by t implantation permeate .apprx.3 .times. 105 Ci/day into the internal He coolant flow. A ***capture*** system will reduce these losses to 6 Ci/day, combined. The reactor hall is designed with a low humidity, air atm. which is continuously processed to handle leakage and permeability losses from the nuclear island at 180 Ci/day while still maintaining T levels below max. permissible

concn. The precessor is also able to handle severe accidental ***releases*** of T at the 26 kg level and permit worker re-entry (with ventilated suits) in a matter of .apprx.1 wk.

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(FILE 'HOME' ENTERED AT 11:18:55 ON 20 NOV 2007)
FILE 'CAPLUS' ENTERED AT 11:19:14 ON 20 NOV 2007
L1 350364 S HYBRID?/BI,AB
L2 122474 S CAPTUR?/BI,AB
L3 3707 S L1 AND L2
L4 856272 S (ELUT? OR RELEAS?)/BI,AB
L5 247 S L3 AND L4
L6 201 S L5 NOT 2007/PY
L7 162 S L6 NOT 2006/PY
L8 141 S L7 NOT 2005/PY
L9 128 S L8 NOT 2004/PY
L10 103 S L9 NOT 2003/PY

=> log y
COST IN U.S. DOLLARS SINCE FILE
TOTAL ENTRY SESSION
FULL ESTIMATED COST 319.50 319.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE
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EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	hybrid$ near5 captur5$	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/20 10:34
L2	7045	hybrid$ near5 captur$5	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/20 10:35
L3	509	(hybrid$ near5 captur$5) same (elut or releas$)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/20 10:44
L4	1174088	@rlad<"20020705"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/20 10:44
L5	318	l3 and l4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/20 10:45

11/20/07 L